

=> fil hcaplus  
FILE 'HCAPLUS' ENTERED AT 11:11:18 ON 30 AUG 2002  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 30 Aug 2002 VOL 137 ISS 10  
FILE LAST UPDATED: 29 Aug 2002 (20020829/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> d all hitstr tot

L145 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 2002 ACS

AN 2002:426622 HCAPLUS

DN 137:24135

TI Cosmetic compositions comprising alkyl or alkenyl derivatives of succinic acid

IN Klug, Peter; Henning, Torsten; Scherl, Franz  
Xaver

PA Clariant GmbH, Germany

SO Eur. Pat. Appl., 12 pp.

CODEN: EPXXDW

DT Patent

LA German

IC ICM A61K007-00

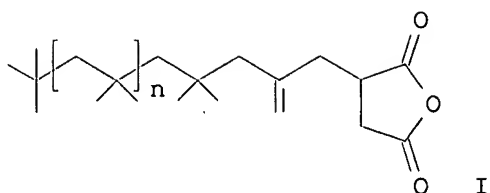
ICS A61K007-48; A61K009-00; A61K009-107

CC 62-4 (Essential Oils and Cosmetics)

Section cross-reference(s): 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	EP 1210929	A2	20020605	EP 2001-127510	20011117 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	DE 10059318	A1	20020620	DE 2000-10059318	20001129 <--
	JP 2002173411	A2	20020621	JP 2001-290983	20010925 <--
PRAI	DE 2000-10059318	A	20001129	<--	
GI					



- AB The invention pertains to cosmetic and pharmaceutical agents contg. at least one **emulsifier**, comprising (a) at least one alkyl chain produced by polymn. of (C2-5)-alkenes and/or an alkenyl chain with at least 28 C, which is coupled to (b) at least one carboxylic acid, carboxylic acid deriv., carboxyanhydride, carboxyanhydride deriv., ester, and/or amide group. As **emulsifier** is preferred compds. of formula (I), where n .gtoreq. 4. The compns. may be used in night creams, sunscreens, etc.
- ST cosmetic sunscreen **emulsifier succinate** deriv
- IT Polyoxyalkylenes, biological studies  
 RL: COS (Cosmetic use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (alkyl/alkenylpolyisobutenylsuccinic derivs.; cosmetic compns. comprising alkyl or alkenyl derivs. of **succinic acid**)
- IT **Cosmetics**  
**Emulsifying agents**  
 Health products  
 Sunscreens  
 (cosmetic compns. comprising alkyl or alkenyl derivs. of **succinic acid**)
- IT **Cosmetics**  
 (creams; cosmetic compns. comprising alkyl or alkenyl derivs. of **succinic acid**)
- IT **Cosmetics**  
 (emulsions; cosmetic compns. comprising alkyl or alkenyl derivs. of **succinic acid**)
- IT **Cosmetics**  
 (gels; cosmetic compns. comprising alkyl or alkenyl derivs. of **succinic acid**)
- IT **Cosmetics**  
 (lotions; cosmetic compns. comprising alkyl or alkenyl derivs. of **succinic acid**)
- IT **Drug delivery systems**  
 (ointments; cosmetic compns. comprising alkyl or alkenyl derivs. of **succinic acid**)
- IT **Cosmetics**  
 (sprays; cosmetic compns. comprising alkyl or alkenyl derivs. of **succinic acid**)
- IT 56-81-5DP, Glycerol, alkyl/alkenylpolyisobutenylsuccinic derivs. 100-37-8DP, Diethylethanolamine, alkyl/alkenylpolyisobutenylsuccinic derivs. 102-71-6DP, alkyl/alkenylpolyisobutenylsuccinic derivs. 108-30-5DP, Succinic anhydride, alkyl/alkenylpolyisobutenyl derivs. 112-35-6DP, Triethylene glycol monomethyl ether, alkyl/alkenylpolyisobutenylsuccinic derivs. 25322-68-3DP, Polyethylene glycol, alkyl/alkenylpolyisobutenylsuccinic derivs.  
 RL: COS (Cosmetic use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (cosmetic compns. comprising alkyl or alkenyl derivs. of **succinic acid**)
- IT 100-37-8, Diethylethanolamine 102-71-6, Triethanolamine, biological studies 110-15-6D, Succinic acid, alkyl and

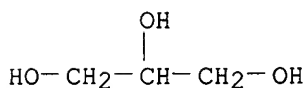
alkenyl derivs. 170211-20-8, Hostacerin dgi  
 RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);  
 USES (Uses)

(cosmetic compns. comprising alkyl or alkenyl derivs. of  
**succinic acid**)

IT 56-81-5DP, Glycerol, alkyl/alkenylpolyisobutenylsuccinic  
 derivs. 100-37-8DP, Diethylethanolamine, alkyl/  
 alkenylpolyisobutenylsuccinic derivs. 102-71-6DP, alkyl/  
 alkenylpolyisobutenylsuccinic derivs. 108-30-5DP,  
 Succinic anhydride, alkyl/alkenylpolyisobutenyl derivs.  
 112-35-6DP, Triethylene glycol monomethyl ether, alkyl/  
 alkenylpolyisobutenylsuccinic derivs. 25322-68-3DP,  
 Polyethylene glycol, alkyl/alkenylpolyisobutenylsuccinic derivs.  
 RL: COS (Cosmetic use); SPN (Synthetic preparation); THU (Therapeutic  
 use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (cosmetic compns. comprising alkyl or alkenyl derivs. of  
**succinic acid**)

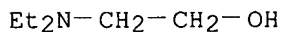
RN 56-81-5 HCAPLUS

CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



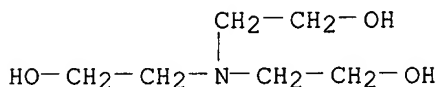
RN 100-37-8 HCAPLUS

CN Ethanol, 2-(diethylamino)- (8CI, 9CI) (CA INDEX NAME)



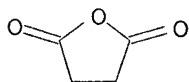
RN 102-71-6 HCAPLUS

CN Ethanol, 2,2',2''-nitrilotris- (9CI) (CA INDEX NAME)



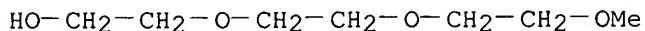
RN 108-30-5 HCAPLUS

CN 2,5-Furandione, dihydro- (9CI) (CA INDEX NAME)



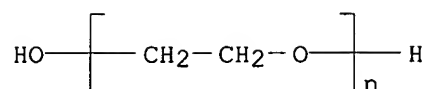
RN 112-35-6 HCAPLUS

CN Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

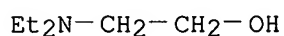


RN 25322-68-3 HCAPLUS

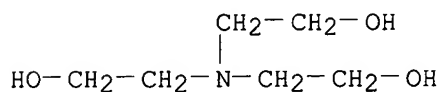
CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy- (9CI) (CA INDEX NAME)



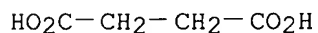
IT 100-37-8, Diethylethanolamine 102-71-6, Triethanolamine,  
 biological studies 110-15-6D, Succinic acid, alkyl and  
 alkenyl derivs. 170211-20-8, Hostacerin dgi  
 RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);  
 USES (Uses)  
 (cosmetic comps. comprising alkyl or alkenyl derivs. of  
 succinic acid)  
 RN 100-37-8 HCAPLUS  
 CN Ethanol, 2-(diethylamino)- (8CI, 9CI) (CA INDEX NAME)



RN 102-71-6 HCAPLUS  
 CN Ethanol, 2,2',2''-nitrilotris- (9CI) (CA INDEX NAME)



RN 110-15-6 HCAPLUS  
 CN Butanedioic acid (9CI) (CA INDEX NAME)



RN 170211-20-8 HCAPLUS  
 CN Isooctadecanoic acid, ester with oxybis[propanediol] (3:2) (9CI) (CA INDEX NAME)

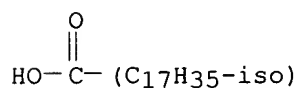
CM 1

CRN 59113-36-9  
 CMF C6 H14 O5  
 CCI IDS, MAN  
 CDES 8:ID

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 30399-84-9  
 CMF C18 H36 O2  
 CCI IDS  
 CDES 8:ID, ISO





L145 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:730528 HCAPLUS

DN 135:278003

TI Compositions and methods for **gene therapy**

IN Vogel, Jean-marie; Boschetti, Egisto

PA Biosphere Medical Inc., USA

SO PCT Int. Appl., 77 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K009-00

CC 63-5 (Pharmaceuticals)

Section cross-reference(s): 8

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001072280	A2	20011004	WO 2001-US9618	20010323 <--
WO 2001072280	A3	20020131		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

PRAI US 2000-191902P P 20000324 <--

AB The present invention relates to injectable compns. comprising biocompatible, swellable, substantially hydrophilic, non-toxic and substantially spherical polymeric material carriers which are capable of efficiently delivering bioactive therapeutic factor(s) phys. linked to a transfection agent for use in embolization gene therapy. The present invention further relates to methods of embolization gene therapy, particularly for the treatment of angiogenic and non-angiogenic-dependent diseases, using the injectable compns.

ST embolization gene therapy delivery polymer carrier

IT Lymphoma  
(Burkitt's; compns. and methods for embolization gene therapy)

IT Bone, neoplasm  
(Ewing's sarcoma; compns. and methods for embolization gene therapy)

IT Sarcoma  
(Kaposi's; compns. and methods for embolization gene therapy)

IT Kidney, neoplasm  
(Wilms'; compns. and methods for embolization gene therapy)

IT Leukemia  
(acute lymphocytic; compns. and methods for embolization gene therapy)

IT Leukemia  
(acute myelogenous; compns. and methods for embolization gene therapy)

IT Angiogenic factors  
Growth inhibitors, animal  
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(angiogenic growth-inhibiting factors; compns. and methods for embolization gene therapy)

IT Polyelectrolytes  
(anionic; compns. and methods for embolization gene therapy)

IT Intestine  
(anus, carcinoma; compns. and methods for embolization gene therapy)

IT Astrocyte  
(astrocytoma; compns. and methods for embolization gene therapy)

IT Bladder

IT Head

Mammary gland  
 Neck, anatomical  
 Ovary, neoplasm  
 Pancreas, neoplasm  
 Prostate gland  
 Testis  
     (carcinoma; compns. and methods for embolization gene therapy)  
 IT **Drug delivery systems**  
     (carriers; compns. and methods for embolization gene therapy)  
 IT Polyelectrolytes  
     (cationic; compns. and methods for embolization gene therapy)  
 IT Uterus, neoplasm  
     (cervix, carcinoma; compns. and methods for embolization gene therapy)  
 IT Leukemia  
     (chronic myelocytic; compns. and methods for embolization gene therapy)  
 IT Intestine, neoplasm  
     (colorectal carcinoma; compns. and methods for embolization gene therapy)  
 IT Angiogenesis  
     Angiogenesis inhibitors  
     Anti-inflammatory agents  
     Antibacterial agents  
     Antihistamines  
     Antitumor agents  
     Brain, neoplasm  
     **Drug delivery systems**  
     Drug targeting  
     Embolism  
     Gene targeting  
     Gene therapy  
     Genetic vectors  
     Hodgkin's disease  
     Kidney, neoplasm  
     Liver, neoplasm  
     Melanoma  
     Multiple myeloma  
     Neoplasm  
     Particle size distribution  
     Saponification  
     Surgery  
     Swelling, physical  
     Syringes  
     Transformation, genetic  
         (compns. and methods for embolization gene therapy)  
 IT Antisense DNA  
     Antisense RNA  
     DNA  
     Polyanhydrides  
     Polynucleotides  
     Polysaccharides, biological studies  
     Polysiloxanes, biological studies  
     Quaternary ammonium compounds, biological studies  
     RNA  
     Ribozymes  
     RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
         (compns. and methods for embolization gene therapy)  
 IT Imaging agents  
     (contrast; compns. and methods for embolization gene therapy)  
 IT Polyoxyalkylenes, biological studies  
     RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(crosslinked; compns. and methods for embolization gene therapy)

IT Polymers, biological studies  
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(crosslinked; compns. and methods for embolization gene therapy)

IT Lymphoma  
(diffuse large cell; compns. and methods for embolization gene therapy)

IT Embolism  
(embolization; compns. and methods for embolization gene therapy)

IT **Drug delivery systems**  
(emulsions; compns. and methods for embolization gene therapy)

IT Polymers, biological studies  
RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(gene carriers; compns. and methods for embolization gene therapy)

IT Leukemia  
(hairy-cell; compns. and methods for embolization gene therapy)

IT Ribozymes  
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(hammerhead; compns. and methods for embolization gene therapy)

IT Liver, neoplasm  
(hepatoma; compns. and methods for embolization gene therapy)

IT **Drug delivery systems**  
(implants; compns. and methods for embolization gene therapy)

IT Mitosis  
(inhibitors; compns. and methods for embolization gene therapy)

IT **Drug delivery systems**  
(injections; compns. and methods for embolization gene therapy)

IT Polyesters, biological studies  
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(lactic acid-based; compns. and methods for embolization gene therapy)

IT Lymphoma  
(lymphoblastic; compns. and methods for embolization gene therapy)

IT **Drug delivery systems**  
(microparticles; compns. and methods for embolization gene therapy)

IT **Drug delivery systems**  
(microspheres; compns. and methods for embolization gene therapy)

IT Lymphoma  
(non-Hodgkin's; compns. and methods for embolization gene therapy)

IT Lung, neoplasm  
(non-small-cell carcinoma; compns. and methods for embolization gene therapy)

IT Bone, neoplasm  
(osteosarcoma; compns. and methods for embolization gene therapy)

IT p53 (protein)  
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(polynucleotide encoding; compns. and methods for embolization gene therapy)

IT Myoma  
(rhabdomyosarcoma; compns. and methods for embolization gene therapy)

IT Lung, neoplasm  
(small-cell carcinoma; compns. and methods for embolization gene therapy)

IT Animal tissue  
(soft, sarcoma; compns. and methods for embolization gene therapy)

IT Neoplasm  
(solid; compns. and methods for embolization gene therapy)

IT Polymers, biological studies

RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(swellable; compns. and methods for embolization gene therapy)

IT 7439-89-6, Iron, uses 7439-95-4, Magnesium, uses 7440-09-7, potassium, uses 7440-23-5, Sodium, uses 7440-66-6, Zinc, uses 7440-70-2, Calcium, uses 7664-41-7, Ammonia, uses

RL: NUU (Other use, unclassified); USES (Uses)

(compns. and methods for embolization gene therapy)

IT 79-10-7D, **Acrylic** acid, esters 557-75-5D, Vinyl alcohol, copolymers 7446-81-3D, Sodium **acrylate**, polymers 9003-04-7, Sodium **polyacrylate** 24980-58-3, **Acrylic** acid-vinyl acetate copolymer 25969-89-5, Methyl maleate-vinyl acetate copolymer 107830-79-5, **Acrylonitrile** starch graft copolymer

RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(compns. and methods for embolization gene therapy)

IT 71-44-3, Spermine 124-20-9, Spermidine 557-75-5D, Vinyl alcohol, polymers 2462-63-7, Dope 4004-05-1, Dope 9002-98-6, Polyethylenimine 9003-01-4D, **Polyacrylic** acid, derivs. 9003-05-8D, **Polyacrylamide**, derivs. 24937-78-8, Poly(ethylene vinyl acetate) 25104-18-1, Polylysine 26023-30-3, Poly[oxy(1-methyl-2-oxo-1,2-ethanediyl)] 26100-51-6, Poly(lactic acid) 26913-06-4, Polyethylenimine 38000-06-5, Polylysine 124050-77-7, Transfectam 124076-29-5 127528-05-6 128835-92-7, Lipofectin 137056-72-5, dc-chol 144189-73-1, Dotap 145310-87-8, Transfectace

RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(compns. and methods for embolization gene therapy)

IT 110-26-9, Methylene bis-**acrylamide**

RL: RCT (Reactant); RACT (Reactant or reagent)

(compns. and methods for embolization gene therapy)

IT 98085-27-9

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(contrast agent; compns. and methods for embolization gene therapy)

IT 26426-80-2, **Isobutylene-maleic** anhydride copolymer

RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); **THU (Therapeutic use)**; BIOL (Biological study); PROC (Process); USES (Uses)

(cross-linked; compns. and methods for embolization gene therapy)

IT 25322-68-3, Polyethylene oxide

RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(crosslinked; compns. and methods for embolization gene therapy)

IT 97-90-5, Ethylene glycol **dimethacrylate** 109-17-1, Tetraethylene glycol **dimethacrylate** 2359-15-1, Methylene bis-**methacrylamide** 17831-71-9, Tetraethylene glycol **diacrylate** 26846-58-2, Pentaerythritol **dimethacrylate** 58477-85-3

RL: RCT (Reactant); RACT (Reactant or reagent)

(crosslinking agent; compns. and methods for embolization gene therapy)

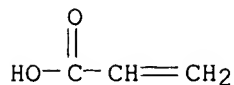
IT 79-10-7D, **Acrylic** acid, esters

RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(compns. and methods for embolization gene therapy)

RN 79-10-7 HCAPLUS

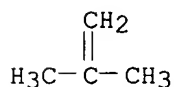
CN 2-Propenoic acid (9CI) (CA INDEX NAME)



IT 26426-80-2, Isobutylene-maleic anhydride  
copolymer  
RL: PEP (Physical, engineering or chemical process); POF (Polymer in  
formulation); THU (Therapeutic use); BIOL (Biological study);  
PROC (Process); USES (Uses)  
(cross-linked; compns. and methods for embolization gene therapy)  
RN 26426-80-2 HCAPLUS  
CN 2,5-Furandione, polymer with 2-methyl-1-propene (9CI) (CA INDEX NAME)

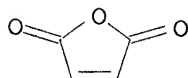
CM 1

CRN 115-11-7  
CMF C4 H8

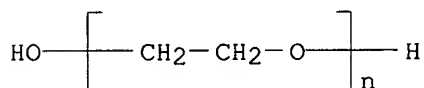


CM 2

CRN 108-31-6  
CMF C4 H2 O3



IT 25322-68-3, Polyethylene oxide  
RL: PEP (Physical, engineering or chemical process); POF (Polymer in  
formulation); THU (Therapeutic use); BIOL (Biological study); PROC  
(Process); USES (Uses)  
(crosslinked; compns. and methods for embolization gene therapy)  
RN 25322-68-3 HCAPLUS  
CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy- (9CI) (CA INDEX  
NAME)



L145 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:152452 HCAPLUS

DN 134:183314

TI PEG compositions for reducing skin irritation and sting from weak  
carboxylic acids

IN Mukherjee, Surajit; Rick, Donald; Habif, Stephan Samuel

PA Unilever PLC, UK; Unilever NV; Hindustan Lever Limited

SO PCT Int. Appl., 49 pp.

CODEN: PIXXD2

DT Patent

LA English  
 IC ICM A61K007-48  
 CC 62-4 (Essential Oils and Cosmetics)  
 FAN.CNT 1

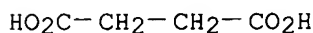
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001013877	A1	20010301	WO 2000-EP7303	20000731 <--
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
PRAI	US 1999-150112P	P	19990820 <--		
AB	A method for reducing skin irritation and/or sting that may be caused by a weak carboxylic acid by adding polyethylene glycol (PEG). Addn. of PEG lowers irritation and sting without reducing the delivery of weak acids to skin tissues.				
ST	PEG carboxylic acid skin irritation; cosmetic carboxylic acid irritation PEG				
IT	Carboxylic acids, biological studies RL: ADV (Adverse effect, including toxicity); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (PEG compns. for reducing skin irritation and sting from weak carboxylic acids)				
IT	Polyoxyalkylenes, biological studies RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (PEG compns. for reducing skin irritation and sting from weak carboxylic acids)				
IT	<b>Cosmetics</b> (emulsions; PEG compns. for reducing skin irritation and sting from weak carboxylic acids)				
IT	Skin, disease (irritation; PEG compns. for reducing skin irritation and sting from weak carboxylic acids)				
IT	50-21-5, Lactic acid, biological studies 50-81-7, Ascorbic acid, biological studies 64-19-7, Acetic acid, biological studies 69-72-7, Salicylic acid, biological studies 77-92-9, Citric acid, biological studies 79-14-1, Glycolic acid, biological studies 110-15-6, Succinic acid, biological studies 300-85-6, .beta.-Hydroxybutyric acid 471-47-6, Oxamic acid 6915-15-7, Malic acid RL: ADV (Adverse effect, including toxicity); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (PEG compns. for reducing skin irritation and sting from weak carboxylic acids)				
IT	25322-68-3, Peg RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (PEG compns. for reducing skin irritation and sting from weak carboxylic acids)				

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD

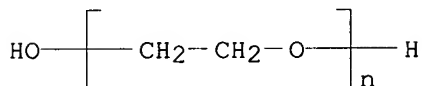
RE

- (1) Anon; PATENT ABSTRACTS OF JAPAN 1980, V004(069), PC-011
- (2) Epstein, H; US 5885593 A 1999 HCAPLUS
- (3) Mather, K; US 5925679 A 1999 HCAPLUS
- (4) Oota, A; JP 55035025 A 1980 HCAPLUS
- (5) Pathak, C; US 5879688 A 1999 HCAPLUS

(6) Quemin, E; US 5736567 A 1998 HCAPLUS  
 (7) Unilever Plc; EP 0729745 A 1996 HCAPLUS  
 (8) Unilever Plc; WO 9938488 A 1999 HCAPLUS  
 (9) Vargas, A; US 5935584 A 1999 HCAPLUS  
 (10) Woller, W; US 5320838 A 1994 HCAPLUS  
 IT 110-15-6, Succinic acid, biological studies  
 RL: ADV (Adverse effect, including toxicity); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (PEG compns. for reducing skin irritation and sting from weak carboxylic acids)  
 RN 110-15-6 HCAPLUS  
 CN Butanedioic acid (9CI) (CA INDEX NAME)



IT 25322-68-3, Peg  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (PEG compns. for reducing skin irritation and sting from weak carboxylic acids)  
 RN 25322-68-3 HCAPLUS  
 CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy- (9CI) (CA INDEX NAME)



L145 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2002 ACS  
 AN 2000:113123 HCAPLUS  
 DN 132:156518  
 TI Derivatized polymers of .alpha.-olefin-maleic anhydride alkyl half-ester or full acid for hair sprays  
 IN Ulmer, Herbert W.; Gillece, Timothy; Katirgis, John A.; Foltis, Linda C.; Blaine, April  
 PA ISP Investments Inc., USA  
 SO U.S., 5 pp., Cont.-in-part of U.S. 5,869,695.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 IC ICM C10M133-16  
 ICS C07D207-40  
 NCL 548545000  
 CC 62-3 (Essential Oils and Cosmetics)  
 Section cross-reference(s): 38

FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6025501	A	20000215	US 1998-103856	19980624 <--
	US 5869695	A	19990209	US 1997-845669	19970425 <--
	WO 9849143	A1	19981105	WO 1998-US4240	19980304 <--
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI,			

FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM,  
GA, GN, ML, MR, NE, SN, TD, TG  
WO 9967216 A1 19991229 WO 1999-US9430 19990429 <--  
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,  
DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,  
KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,  
MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,  
TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,  
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,  
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
AU 9937749 A1 20000110 AU 1999-37749 19990429 <--  
EP 1098877 A1 20010516 EP 1999-920192 19990429 <--  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, FI  
JP 2002518554 T2 20020625 JP 2000-555870 19990429 <--  
PRAI US 1997-845669 A2 19970425 <--  
WO 1998-US4240 W 19980304 <--  
US 1998-103386 A 19980624 <--  
US 1998-103856 A 19980624 <--  
US 1998-104309 A 19980624 <--  
WO 1999-US9430 W 19990429 <--  
AB Derivatized polymers of .alpha.-olefin-**maleic** anhydride alkyl  
half-ester or full acid, preferably the **isobutylene** compd.,  
optionally with repeat units of maleamic acid and/or its corresponding  
maleimide therein are described. These polymers are useful as fixatives  
in personal care products, such as hair spray compns., particularly as  
one-phase, low VOC formulations in pump and aerosol systems, and in  
anhyd., alc., aq.-alc. and in high hydrocarbon tolerant solvent  
formulations. In use, these hair spray compns. dry down to form clear,  
continuous and defectless films. Poly(**isobutylene-**  
**maleic** anhydride) (I) was prepd. by the copolymn. of  
**isobutylene** with **maleic** anhydride. A hydroalcoholic  
aerosol hair spray contained SD alc. 40B 200 52.50, imidized I 12.50 (40%  
solids, 27% H2O, 33% EtOH) di-Me ether 35.00, and resin solids 5%.  
ST hair spray olefin **maleic** anhydride polymer  
IT Hair preparations  
(sprays; derivatized polymers of olefin-**maleic** anhydride  
alkyl half-ester or full acid for hair sprays)  
IT Alkenes, biological studies  
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL  
(Biological study); PREP (Preparation); USES (Uses)  
(.alpha.-, copolymers with **maleic** anhydride; derivatized  
polymers of olefin-**maleic** anhydride alkyl half-ester or full  
acid for hair sprays)  
IT 108-31-6DP, **Maleic** anhydride, copolymers with .alpha.-olefins  
**26426-80-2P**, **Isobutylene-maleic** anhydride  
copolymer  
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL  
(Biological study); PREP (Preparation); USES (Uses)  
(derivatized polymers of olefin-**maleic** anhydride alkyl  
half-ester or full acid for hair sprays)  
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
RE  
(1) Ulmer; US 5869695 1999 HCAPLUS  
(2) Ulmer; US 5886194 1999 HCAPLUS  
IT **26426-80-2P**, **Isobutylene-maleic** anhydride  
copolymer  
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL  
(Biological study); PREP (Preparation); USES (Uses)  
(derivatized polymers of olefin-**maleic** anhydride alkyl  
half-ester or full acid for hair sprays)  
RN **26426-80-2** HCAPLUS

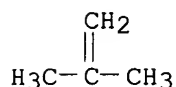


CN 2,5-Furandione, polymer with 2-methyl-1-propene (9CI) (CA INDEX NAME)

CM 1

CRN 115-11-7

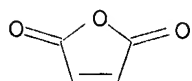
CMF C4 H8



CM 2

CRN 108-31-6

CMF C4 H2 O3



L145 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:819348 HCAPLUS

DN 132:54590

TI Derivatized polymers of .alpha.-olefin-maleic anhydride for  
cosmetic formulationsIN Ulmer, Herbert W.; Gillece, Timothy; Katirgis, John A.; Foltis, Linda C.;  
Blaine, April

PA Isp Investments Inc., USA

SO PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C07D207-40

ICS A61K007-06; A61K031-74

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 37

FAN.CNT 5

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9967216	A1	19991229	WO 1999-US9430	19990429 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 5886194	A	19990323	US 1998-103386	19980624 <--
US 5959122	A	19990928	US 1998-104309	19980624 <--
US 6025501	A	20000215	US 1998-103856	19980624 <--
AU 9937749	A1	20000110	AU 1999-37749	19990429 <--
EP 1098877	A1	20010516	EP 1999-920192	19990429 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002518554	T2	20020625	JP 2000-555870	19990429 <--
PRAI US 1998-103386	A	19980624	<--	

US 1998-103856 A 19980624 <--  
 US 1998-104309 A 19980624 <--  
 US 1997-845669 A2 19970304 <--  
 WO 1998-US4240 W 19980304 <--  
 WO 1999-US9430 W 19990429 <--

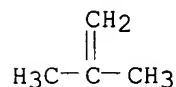
- AB Derivatized polymers of .alpha.-olefin-**maleic** anhydride alkyl half-ester or full acid, preferably the **isobutylene** compd., optionally with repeat units of maleamic acid and/or its corresponding maleimide are described. These polymers are useful as fixatives in personal care products, such as hair spray compns., particularly as 1-phase, low VOC formulations in pump and aerosol systems, and in anhyd., alc., aq.-alc. and in high hydrocarbon tolerant solvent formulations. These hair spray compns. dry down to form clear, continuous and defectless films. **Maleic** anhydride was mixed with decanoyl peroxide as initiator, octadecyl vinyl ether as suspending agent and pentane as solvent in a sealed reactor under N. The reactor was heated to 80.degree. over a 30-min period. At 80.degree., **isobutylene** monomer was fed into the reactor over a 4-h period. The resultant product was a finely divided, off-white slurry of poly(**isobutylene-maleic** anhydride) copolymer in pentane. The above polymer was allowed to with octadecylamine in EtOH at 50-100.degree.. On cooling, the polymer had an acid no. of 225 mg KOH/g polymer. A single-phase hydroalc. aerosol hair spray formulation contained anhyd. alc. 52.50, the above polymer (40% solids, 27% H2O, and 33% EtOH) 12.50, and di-Me ether 35.00%.
- ST **isobutylene maleic** anhydride copolymer hair spray  
 prepn; amine **isobutylene maleic** anhydride copolymer  
 spray prepn
- IT **Cosmetics**  
 (derivatized polymers of .alpha.-olefin-**maleic** anhydride for  
 cosmetic formulations)
- IT Hair preparations  
 (gels; derivatized polymers of .alpha.-olefin-**maleic**  
 anhydride for cosmetic formulations)
- IT Hair preparations  
 (mousses; derivatized polymers of .alpha.-olefin-**maleic**  
 anhydride for cosmetic formulations)
- IT Amines, biological studies  
 RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)  
 (reaction products, with poly(**isobutylene-co-maleic**  
 anhydride); derivatized polymers of .alpha.-olefin-**maleic**  
 anhydride for cosmetic formulations)
- IT Hair preparations  
 (sprays; derivatized polymers of .alpha.-olefin-**maleic**  
 anhydride for cosmetic formulations)
- IT 75-04-7DP, Ethylamine, reaction products with poly(**isobutylene**  
 -co-**maleic** anhydride) 104-75-6DP, 2-Ethylhexylamine, reaction  
 products with poly(**isobutylene-co-maleic** anhydride)  
 109-73-9DP, n-Butylamine, reaction products with poly(**isobutylene**  
 -co-**maleic** anhydride) 111-86-4DP, n-Octylamine, reaction  
 products with poly(**isobutylene-co-maleic** anhydride)  
 124-22-1DP, n-Dodecylamine, reaction products with poly(  
**isobutylene-co-maleic** anhydride) 124-30-1DP,  
 n-Octadecylamine, reaction products with poly(**isobutylene-co-**  
**maleic** anhydride) 141-43-5DP, Ethanolamine, reaction products  
 with poly(**isobutylene-co-maleic** anhydride)  
 156-87-6DP, 3-Amino-1-propanol, reaction products with poly(  
**isobutylene-co-maleic** anhydride) 26426-80-2DP,  
**Isobutylene-maleic** anhydride copolymer, reaction  
 products with primary amines  
 RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)  
 (derivatized polymers of .alpha.-olefin-**maleic** anhydride for

cosmetic formulations)  
IT 26426-80-2P, Isobutylene-maleic anhydride  
copolymer  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(derivatized polymers of .alpha.-olefin-maleic anhydride for  
cosmetic formulations)  
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
RE  
(1) Ulmer; US 5886194 A 1999 HCAPLUS  
IT 26426-80-2DP, Isobutylene-maleic anhydride  
copolymer, reaction products with primary amines  
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL  
(Biological study); PREP (Preparation); USES (Uses)  
(derivatized polymers of .alpha.-olefin-maleic anhydride for  
cosmetic formulations)  
RN 26426-80-2 HCAPLUS  
CN 2,5-Furandione, polymer with 2-methyl-1-propene (9CI) (CA INDEX NAME)

CM 1

CRN 115-11-7

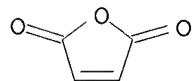
CMF C4 H8



CM 2

CRN 108-31-6

CMF C4 H2 O3

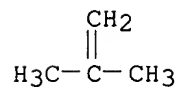


IT 26426-80-2P, Isobutylene-maleic anhydride  
copolymer  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(derivatized polymers of .alpha.-olefin-maleic anhydride for  
cosmetic formulations)  
RN 26426-80-2 HCAPLUS  
CN 2,5-Furandione, polymer with 2-methyl-1-propene (9CI) (CA INDEX NAME)

CM 1

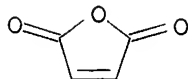
CRN 115-11-7

CMF C4 H8



CM 2

CRN 108-31-6  
CMF C4 H2 O3



L145 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:215549 HCAPLUS

DN 130:242122

TI Hydroxyamino-derivatized polymers of **olefin-maleic**  
anhydride

IN Ulmer, Herbert W.; Gillece, Timothy; Katirgis, John A.

PA ISP Investments Inc., USA

SO U.S., 5 pp., Cont.-in-part of U.S. 845,669.

CODEN: USXXAM

DT Patent

LA English

IC C10M133-16; C07D207-40

NCL 548545000

CC 62-1 (Essential Oils and **Cosmetics**)

Section cross-reference(s): 35

FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	US 5886194	A	19990323	US 1998-103386	19980624	<--
	US 5869695	A	19990209	US 1997-845669	19970425	<--
	WO 9967216	A1	19991229	WO 1999-US9430	19990429	<--
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 9937749	A1	20000110	AU 1999-37749	19990429	<--
	EP 1098877	A1	20010516	EP 1999-920192	19990429	<--
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2002518554	T2	20020625	JP 2000-555870	19990429	<--
PRAI	US 1997-845669	A2	19970304			<--
	US 1998-103386	A	19980624			<--
	US 1998-103856	A	19980624			<--
	US 1998-104309	A	19980624			<--
	WO 1999-US9430	W	19990429			<--
AB	This invention describes hydroxyamino-derivatized polymers of .alpha.-olefin-maleic anhydride in the form of their maleimide, maleamic acid and .alpha.-olefin-maleic anhydride half-acid/half ester or full acid repeat units process for making same. The polymers are made by reacting an .alpha.-olefin-maleic anhydride, half-acid/half-ester or full acid with a hydroxy contg. .alpha.-unsubstituted primary amine in aq. or aq. alc. soln. at a temp. of about 60.degree.-160.degree. C. during a reaction period of about 1-25 h. <b>Isobutylene-maleic</b> anhydride copolymers was treated with N-butylamine and ethanolamine in EtOH to give a polymer with a predominance of maleimide repeating units over maleamic acid units.					
ST	olefin <b>maleic</b> anhydride polymer hydroxyamino					

IT **Cosmetics**

(hydroxyamino-derivatized polymers of olefin-maleic anhydride)

IT 75-04-7DP, Ethylamine, reaction products with **isobutylene-maleic** anhydride copolymer 109-73-9DP, n-Butylamine, reaction products with **isobutylene-maleic** anhydride copolymer 124-22-1DP, Dodecylamine, reaction products with **isobutylene-maleic** anhydride copolymer 141-43-5DP, Ethanolamine, reaction products with **isobutylene-maleic** anhydride copolymer 156-87-6DP, 3-Amino-1-propanol, reaction products with **isobutylene-maleic** anhydride copolymer **26426-80-2DP**, **Isobutylene-maleic** anhydride copolymer, aminolyzed 68335-16-0DP, aminolyzed

RL: BUU (Biological use, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (hydroxyamino-derivatized polymers of olefin-maleic anhydride)

RE.CNT 1 . THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Gutierrez; US 4839072 1989 HCAPLUS

IT **26426-80-2DP**, **Isobutylene-maleic** anhydride copolymer, aminolyzed

RL: BUU (Biological use, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (hydroxyamino-derivatized polymers of olefin-maleic anhydride)

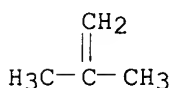
RN 26426-80-2 HCAPLUS

CN 2,5-Furandione, polymer with 2-methyl-1-propene (9CI) (CA INDEX NAME)

CM 1

CRN 115-11-7

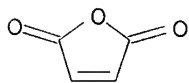
CMF C4 H8



CM 2

CRN 108-31-6

CMF C4 H2 O3



L145 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2002 ACS

AN 1998:531618 HCAPLUS

DN 129:293780

TI Drug release from intelligent poly(methacrylic acid)-1-**polyisobutylene** polyelectrolyte amphiphilic **conetworks**

AU Janecska, Akos; Ivan, Bela

CS Institute of Chemistry, Chemical Research Center of the Hungarian Academy of Sciences, Pusztaszeri, H-1525, Hung.

SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (1998), 39(2), 208-209

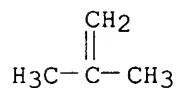
CODEN: ACPPAY; ISSN: 0032-3934

PB American Chemical Society, Division of Polymer Chemistry  
 DT Journal  
 LA English  
 CC 63-5 (Pharmaceuticals)  
 AB Poly(**methacrylic acid**)-linked-**polyisobutylene**  
 amphiphilic polyelectrolyte conetworks were prepd. Sustained drug release  
 was obsd. with theophylline with a sample contg. 50%  
**polyisobutylene**.  
 ST sustained drug release **polymethacrylic acid**  
**polyisobutylene**  
 IT Dissolution rate  
 Polyelectrolytes  
 (drug release from intelligent poly(**methacrylic acid**)-linked-  
**polyisobutylene** polyelectrolyte amphiphilic conetworks)  
 IT **Drug delivery systems**  
 (sustained-release; drug release from intelligent poly(  
**methacrylic acid**)-linked-**polyisobutylene**  
 polyelectrolyte amphiphilic conetworks)  
 IT **54406-39-2P**, 1-Propene, 2-methyl-, polymer with  
 2-methyl-2-propenoic acid  
 RL: PRP (Properties); SPN (Synthetic preparation); **THU (Therapeutic**  
**use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (drug release from intelligent poly(**methacrylic acid**)-linked-  
**polyisobutylene** polyelectrolyte amphiphilic conetworks)  
 IT 58-55-9, Theophylline, biological studies  
 RL: PRP (Properties); **THU (Therapeutic use)**; BIOL (Biological study); USES  
 (Uses)  
 (drug release from intelligent poly(**methacrylic acid**)-linked-  
**polyisobutylene** polyelectrolyte amphiphilic conetworks)  
 IT **54406-39-2P**, 1-Propene, 2-methyl-, polymer with  
 2-methyl-2-propenoic acid  
 RL: PRP (Properties); SPN (Synthetic preparation); **THU (Therapeutic**  
**use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (drug release from intelligent poly(**methacrylic acid**)-linked-  
**polyisobutylene** polyelectrolyte amphiphilic conetworks)  
 RN 54406-39-2 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, polymer with 2-methyl-1-propene (9CI) (CA  
 INDEX NAME)

CM 1

CRN 115-11-7

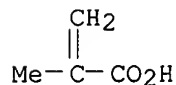
CMF C4 H8



CM 2

CRN 79-41-4

CMF C4 H6 O2



L145 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2002 ACS

AN 1996:188933 HCAPLUS

DN 124:233491

TI **Modified maleic acid copolymers and their use as drug carrier**

IN Waki, Kazunori; Shiino, Taijiro; Sakurai, Yasuhisa; Okano, Mitsuo; Kataoka, Kazunori; Koyama, Yoshuki; Ishihara, Shoji

PA Nippon Oils &amp; Fats Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08F008-32

ICS A61K047-32; C08F022-06

CC 35-8 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 63

FAN.CNT 1

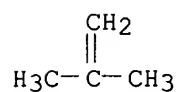
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07330824	A2	19951219	JP 1994-133291	19940615 <--
AB	Random copolymers of <b>maleic</b> anhydride and other vinyl monomers having a <b>maleic</b> acid/vinyl monomer ratio of 1:0.01 to 1:100 are modified with a functional group contg. fluoroalkylphenylboric acid through amide linkages. The modified polymers have mol. wt. 1,000-1,000,000 and are designed as drug carrier for gastrointestinal drugs. One such polymer was synthesized by polymg. <b>maleic</b> anhydride (0.1 mol) and N-vinylpyrrolidone (0.1 mol) followed by reacting the polymer with 3-aminoacetyl amino-6-heptafluoropropylphenylboric acid; adhesion property of the polymer to intestinal tissue was tested.				
ST	<b>maleic</b> acid vinyl polymer modification; phenylboric acid fluoro <b>maleic</b> polymer; pharmaceutical drug carrier intestinal				
IT	Pharmaceuticals (gastrointestinal drugs contg. modified <b>maleic</b> acid copolymers as drug carrier)				
IT	Pharmaceutical dosage forms (carriers, modified <b>maleic</b> acid copolymers and their use as drug carrier)				
IT	9011-07-8DP, <b>Maleic</b> anhydride-vinyl acetate copolymer, reaction products 9011-13-6DP, <b>Maleic</b> anhydride-styrene copolymer, reaction products 26426-80-2DP, <b>Isobutene-maleic</b> anhydride copolymer, reaction products 62849-65-4DP, <b>Maleic</b> anhydride-N-vinylpyrrolidone copolymer, reaction products 174778-59-7DP, reaction products with <b>maleic</b> acid copolymers 174778-60-0DP, reaction products with <b>maleic</b> acid copolymers 174778-61-1DP, reaction products with <b>maleic</b> acid copolymers RL: PRP (Properties); SPN (Synthetic preparation); THU ( <b>Therapeutic use</b> ); BIOL (Biological study); PREP (Preparation); USES (Uses) (modified <b>maleic</b> acid copolymers and their use as drug carrier)				
IT	9011-07-8P, <b>Maleic</b> anhydride-vinyl acetate copolymer 9011-13-6P, <b>Maleic</b> anhydride-styrene copolymer 26426-80-2P, <b>Isobutene-maleic</b> anhydride copolymer 62849-65-4P, <b>Maleic</b> anhydride-N-vinylpyrrolidone copolymer RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. of modified <b>maleic</b> acid copolymers)				
IT	26426-80-2DP, <b>Isobutene-maleic</b> anhydride copolymer, reaction products RL: PRP (Properties); SPN (Synthetic preparation); THU ( <b>Therapeutic use</b> ); BIOL (Biological study); PREP (Preparation); USES (Uses) (modified <b>maleic</b> acid copolymers and their use as drug carrier)				

carrier)  
RN 26426-80-2 HCAPLUS  
CN 2,5-Furandione, polymer with 2-methyl-1-propene (9CI) (CA INDEX NAME)

CM 1

CRN 115-11-7

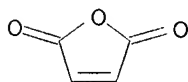
CMF C4 H8



CM 2

CRN 108-31-6

CMF C4 H2 O3



IT 26426-80-2P, Isobutene-maleic anhydride  
copolymer  
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP  
(Preparation); RACT (Reactant or reagent)  
(prepn. of modified maleic acid copolymers)

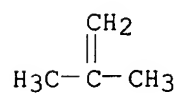
RN 26426-80-2 HCAPLUS

CN 2,5-Furandione, polymer with 2-methyl-1-propene (9CI) (CA INDEX NAME)

CM 1

CRN 115-11-7

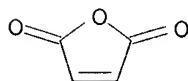
CMF C4 H8



CM 2

CRN 108-31-6

CMF C4 H2 O3



L145 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2002 ACS

AN 1995:693749 HCAPLUS

DN 123:92943

TI Transparent gel-type perfume compositions containing isobutylene



-**maleic** anhydride copolymer ammonium salt, polyamines, oxalate esters, and water

IN Taniguchi, Yasuo; Kuriki, Yoshihiro; Myawaki, Hideaki

PA Taiyo Koryo Kk, Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-46

ICA A61L009-01

CC 62-5 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07126137	A2	19950516	JP 1993-275797	19931104 <--
AB	The title perfume compns. contain <b>isobutylene-maleic</b> anhydride copolymer ammonium salt 1.0-15.0, polyamines 0.01-3.0, oxalate esters 0.1-10.0, perfumes 0.01-15.0, and H2O .gtoreq.40.0 wt.%. The compns. inhibited NH3 generation and did not show color changes after prolonged storage. A perfume compn. was formulated from H2O 72.7, Isobam A 6.0, C-2 (polyamine) 0.3, polyoxyethylene nonylphenyl ether 8.0, 3-methyl-3-methoxybutanol 5.0, and di-Et oxalate 3.0 g.				
ST	perfume <b>isobutylene maleic</b> anhydride copolymer; polyamine oxalate polymer perfume gel				
IT	Perfumes (transparent gel-type perfumes contg. <b>isobutylene-maleic</b> anhydride copolymer ammonium salt, polyamines, oxalate esters, and H2O)				
IT	Amines, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (poly-, transparent gel-type perfumes contg. <b>isobutylene-maleic</b> anhydride copolymer ammonium salt, polyamines, oxalate esters, and H2O)				
IT	95-92-1, Diethyl oxalate 2050-60-4, Dibutyl oxalate 52032-17-4, <b>Isobutylene-maleic</b> anhydride copolymer ammonium salt RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (transparent gel-type perfumes contg. <b>isobutylene-maleic</b> anhydride copolymer ammonium salt, polyamines, oxalate esters, and H2O)				
IT	52032-17-4, <b>Isobutylene-maleic</b> anhydride copolymer ammonium salt RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (transparent gel-type perfumes contg. <b>isobutylene-maleic</b> anhydride copolymer ammonium salt, polyamines, oxalate esters, and H2O)				
RN	52032-17-4 HCAPLUS				
CN	2,5-Furandione, polymer with 2-methyl-1-propene, ammonium salt (9CI) (CA INDEX NAME)				

CM 1

CRN 26426-80-2

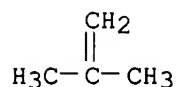
CMF (C4 H8 . C4 H2 O3)x

CCI PMS

CM 2

CRN 115-11-7

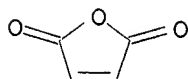
CMF C4 H8



CM 3

CRN 108-31-6

CMF C4 H2 O3



L145 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2002 ACS

AN 1994:517312 HCAPLUS

DN 121:117312

TI Cosmetic composition containing **succinic** acid esters

IN Rawlings, Anthony Vincent; Rossall, Brian

PA Unilever PLC, UK; Unilever N. V.

SO PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K007-48

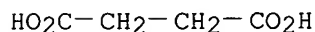
ICS A61K007-06

CC 62-1 (Essential Oils and **Cosmetics**)

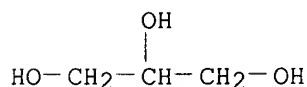
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9410971	A1	19940526	WO 1993-EP3095	19931104 <--
	W: AT, AU, BB, BG, BR, BY, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, LV, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, UZ, VN				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9454640	A1	19940608	AU 1994-54640	19931104 <--
PRAI	GB 1992-23578		19921111 <--		
	WO 1993-EP3095		19931104 <--		
AB	A compn. for topical application to skin, hair or nails comprises: (i) an effective amt. of a <b>succinic</b> acid ester having a lipid-like structure, (ii) a cosmetically acceptable vehicle. A skin lotion contained the <b>succinic</b> acid ester [C22H43OC(O)CH(CH:CHC14H29)CH2C(O)(OC2H4)4-5EOOH] 0.08, EtOH 10, perfume 0.5, and water to 100% wt./wt.				
ST	<b>succinate</b> ester cosmetic				
IT	Surfactants				
	Ceramides				
	Siloxanes and Silicones, biological studies				
	RL: BIOL (Biological study)				
	(cosmetic compns. contg. <b>succinic</b> acid esters and)				
IT	Nail (anatomical)				
	(cosmetics for, <b>succinic</b> acid esters for)				
IT	<b>Cosmetics</b>				
	Hair preparations				
	(succinic acid esters for)				
IT	<b>Cosmetics</b>				
	(creams, <b>succinic</b> acid esters for)				
IT	<b>Cosmetics</b>				

(emulsions, succinic acid esters for)  
 IT **Cosmetics**  
 (liposomes, succinic acid esters for)  
 IT **Cosmetics**  
 (lotions, succinic acid esters for)  
 IT Sunburn and Suntan  
 (suntanning agents, succinic acid esters for)  
 IT **110-15-6D**, Butanedioic acid, esters 153311-81-0 153311-82-1  
 156944-61-5 156944-62-6 156944-63-7  
 RL: BIOL (Biological study)  
 (cosmetic compns. contg.)  
 IT **56-81-5D**, 1,2,3-Propanetriol, ethers 111-01-3, Squalane  
 111-02-4, Squalene  
 RL: BIOL (Biological study)  
 (cosmetic compns. contg. succinic acid esters and)  
 IT **110-15-6D**, Butanedioic acid, esters  
 RL: BIOL (Biological study)  
 (cosmetic compns. contg.)  
 RN 110-15-6 HCAPLUS  
 CN Butanedioic acid (9CI) (CA INDEX NAME)



IT **56-81-5D**, 1,2,3-Propanetriol, ethers  
 RL: BIOL (Biological study)  
 (cosmetic compns. contg. succinic acid esters and)  
 RN 56-81-5 HCAPLUS  
 CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



L145 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2002 ACS  
 AN 1990:223161 HCAPLUS  
 DN 112:223161  
 TI Aqueous gelation agents containing **olefin-maleic**  
 anhydride copolymer and gelatins  
 IN Sajima, Masaaki; Akimoto, Shinichi  
 PA Nippon Oils and Fats Co., Ltd., Japan; Sairando Koryo Y. K.  
 SO Jpn. Kokai Tokkyo Koho, 5 pp.  
 CODEN: JKXXAF

DT Patent  
 LA Japanese  
 IC ICM C09K003-00  
 ICS A61K007-00; A61K007-02; A61L009-01  
 CC **62-5** (Essential Oils and **Cosmetics**)  
 Section cross-reference(s): 5, 46

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 01297484	A2	19891130	JP 1988-126935	19880526 <--
AB	An aq. gelation agent consists of reaction products of olefin- <b>maleic</b> anhyd. copolymer with gelatins or collagens. The gel is uniform even in the presence of water-insol. compds. or strongly hydrophilic surfactants. The gel may be used in manufg. air fresheners, pet repellents, detergents, etc. Thus, 4.5 g gelatin (mol. wt. 55,000-100,000) and 0.5 g sugar were mixed with 75g H2O at pH 7.0,				

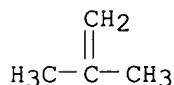
dissolved at 60-70.degree., and cooled to 40.degree.. To this mixt. was added 20g aq. soln. consisting of a floral perfume 6.0, 4-nonanylphenylpoly(oxyethylene) ether 4.0, **isobutylene-maleic** anhyd. copolymer 0.8, EtOH 2.0, propylene glycol 0.2, water 7.0 g to give an air freshener gel.

- ST gel gelatin collagen polymer; air freshener gel polymer; agrochem gel polymer; detergent gel polymer
- IT Detergents  
Repellents  
(manuf. of, gelation agents for)
- IT Alkenes, polymers  
RL: BIOL (Biological study)  
(with **maleic** anhydride, reaction products of gelatins and, as gelation agents)
- IT Deodorants  
(air fresheners, manuf. of, gelation agents for)
- IT Collagens, compounds  
Gelatins, compounds  
RL: PREP (Preparation)  
(reaction products, with **maleic** anhydride-olefin copolymer, prepn. of, as gelation agents)
- IT 108-31-6DP, 2,5-Furandione, polymers with olefins, reaction products with gelatins or collagens **26426-80-2DP, Isobutylene-maleic** anhydride copolymer, reaction products with gelatins  
RL: PREP (Preparation)  
(prepn. of, as gelation agents)
- IT **26426-80-2DP, Isobutylene-maleic** anhydride copolymer, reaction products with gelatins  
RL: PREP (Preparation)  
(prepn. of, as gelation agents)
- RN 26426-80-2 HCAPLUS
- CN 2,5-Furandione, polymer with 2-methyl-1-propene (9CI) (CA INDEX NAME)

CM 1

CRN 115-11-7

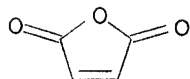
CMF C4 H8



CM 2

CRN 108-31-6

CMF C4 H2 O3



=> fil reg

FILE 'REGISTRY' ENTERED AT 11:11:38 ON 30 AUG 2002

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2002 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 28 AUG 2002 HIGHEST RN 445373-06-8  
DICTIONARY FILE UPDATES: 28 AUG 2002 HIGHEST RN 445373-06-8

Jan Delaval  
Reference Librarian  
Biotechnology & Chemical Library  
CM1 1E07 - 703-308-4498  
jan.delaval@uspto.gov

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES  
for more information. See STNote 27, Searching Properties in the CAS  
Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> d 119 tot ide can

L19 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2002 ACS

RN 110-15-6 REGISTRY

CN Butanedioic acid (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

✓ CN Succinic acid (8CI)

OTHER NAMES:

CN 1,2-Ethanedicarboxylic acid

CN 1,4-Butanedioic acid

CN A 12084

CN Amber acid

CN Asuccin

CN Dihydrofumaric acid

CN Katasuccin

CN Wormwood acid

FS 3D CONCORD

MF C4 H6 O4

CI COM

LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN,  
CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DETHERM\*, DIOGENES,  
DIPPR\*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPAT, ENCOMPAT2,  
GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*,  
MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM\*, PIRA, PROMT, RTECS\*, SPECINFO,  
SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL, VETU, VTB

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

HO<sub>2</sub>C-CH<sub>2</sub>-CH<sub>2</sub>-CO<sub>2</sub>H

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

17534 REFERENCES IN FILE CA (1967 TO DATE)

1987 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

17544 REFERENCES IN FILE CAPLUS (1967 TO DATE)

9 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:146186

REFERENCE 2: 137:145609

REFERENCE 3: 137:145608

REFERENCE 6: 137:140338  
REFERENCE 7: 137:127371  
REFERENCE 8: 137:127263  
REFERENCE 9: 137:126814  
REFERENCE 10: 137:126794

L18 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2002 ACS

RN 115-07-1 REGISTRY

CN 1-Propene (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Propene (8CI)

OTHER NAMES:

CN 1-Propylene

CN Methylethylene

CN **Propylene**

CN R 1270

FS 3D CONCORD

DR 676-63-1, 33004-01-2

MF C3 H6

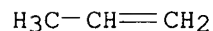
CI COM

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM\*, DIPPR\*, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK\*, MSDS-OHS, NIOSHTIC, PDLCOM\*, PIRA, PROMT, RTECS\*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL, VTB

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

29717 REFERENCES IN FILE CA (1967 TO DATE)

2306 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

29749 REFERENCES IN FILE CAPLUS (1967 TO DATE)

28 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:149446  
REFERENCE 2: 137:148864  
REFERENCE 3: 137:147680  
REFERENCE 4: 137:147104  
REFERENCE 5: 137:146124  
REFERENCE 6: 137:145957  
REFERENCE 7: 137:145706  
REFERENCE 8: 137:144535

REFERENCE 9: 137:144363

REFERENCE 10: 137:144222

L18 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2002 ACS

RN 74-85-1 REGISTRY

CN Ethene (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN **Ethylene** (8CI)

OTHER NAMES:

CN Acetene

CN Bicarburretted hydrogen

CN Elayl

CN Olefiant gas

FS 3D CONCORD

DR 87701-64-2, 87701-65-3, 33060-30-9

MF C2 H4

CI COM

LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM\*, DIOGENES, DIPPR\*, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM\*, PIRA, PROMT, RTECS\*, SPECINFO, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VTB

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

H<sub>2</sub>C=CH<sub>2</sub>

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

64732 REFERENCES IN FILE CA (1967 TO DATE)

10847 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

64793 REFERENCES IN FILE CAPLUS (1967 TO DATE)

22 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:148864

REFERENCE 2: 137:147737

REFERENCE 3: 137:147705

REFERENCE 4: 137:147680

REFERENCE 5: 137:147331

REFERENCE 6: 137:146032

REFERENCE 7: 137:145963

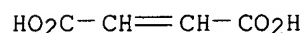
REFERENCE 8: 137:145893

REFERENCE 9: 137:145847

REFERENCE 10: 137:145706

=> d 124 tot ide can

L24 ANSWER 1 OF 8 REGISTRY COPYRIGHT 2002 ACS  
RN 6915-18-0 REGISTRY  
CN 2-Butenedioic acid (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Butenedioic acid (8CI)  
OTHER NAMES:  
CN 1,2-Ethenedicarboxylic acid  
CN 1,2-Ethylenedicarboxylic acid  
FS 3D CONCORD  
MF C4 H4 O4  
CI COM  
LC STN Files: ANABSTR, BEILSTEIN\*, BIOSIS, CA, CAPLUS, CASREACT,  
CHEMINFORMRX, CIN, DETHERM\*, GMELIN\*, IFICDB, IFIUDB, PROMT, TOXCENTER,  
USPATFULL  
(\*File contains numerically searchable property data)



**\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\***

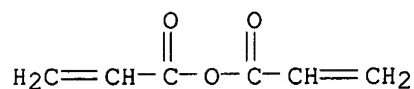
110 REFERENCES IN FILE CA (1967 TO DATE)  
28 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
110 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 137:128796  
REFERENCE 2: 136:344841  
REFERENCE 3: 136:316756  
REFERENCE 4: 136:286525  
REFERENCE 5: 136:153739  
REFERENCE 6: 135:312681  
REFERENCE 7: 135:89841  
REFERENCE 8: 135:61378  
REFERENCE 9: 134:344960  
REFERENCE 10: 134:27004

L24 ANSWER 2 OF 8 REGISTRY COPYRIGHT 2002 ACS  
RN 2051-76-5 REGISTRY  
CN 2-Propenoic acid, anhydride (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN **Acrylic anhydride (6CI, 7CI, 8CI)**  
OTHER NAMES:  
CN Acrylic acid anhydride  
FS 3D CONCORD  
MF C6 H6 O3  
CI COM  
LC STN Files: BEILSTEIN\*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS,  
CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, IFICDB, IFIPAT, IFIUDB, MSDS-OHS,  
PDLCOM\*, PIRA, PROMT, TOXCENTER, USPATFULL, VTB  
(\*File contains numerically searchable property data)  
Other Sources: EINECS\*\*



(\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

175 REFERENCES IN FILE CA (1967 TO DATE)  
 24 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 175 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
 25 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:35400  
 REFERENCE 2: 137:33092  
 REFERENCE 3: 136:102188  
 REFERENCE 4: 136:86136  
 REFERENCE 5: 135:137827  
 REFERENCE 6: 135:137826  
 REFERENCE 7: 135:34315  
 REFERENCE 8: 134:331675  
 REFERENCE 9: 134:331674  
 REFERENCE 10: 134:310748

L24 ANSWER 3 OF 8 REGISTRY COPYRIGHT 2002 ACS

RN 760-93-0 REGISTRY

CN 2-Propenoic acid, 2-methyl-, anhydride (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN **Methacrylic anhydride (6CI, 8CI)**

OTHER NAMES:

CN Methacrylic acid anhydride

CN Methacryloyl anhydride

FS 3D CONCORD

MF C8 H10 O3

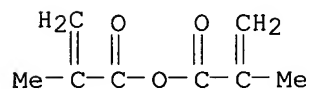
CI COM

LC STN Files: BEILSTEIN\*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, MSDS-OHS, PIRA, RTECS\*, SPECINFO, TOXCENTER, USPAT2, USPATFULL

(\*File contains numerically searchable property data)

Other Sources: EINECS\*\*, NDSL\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

433 REFERENCES IN FILE CA (1967 TO DATE)  
67 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
436 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
25 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:140871  
REFERENCE 2: 137:94169  
REFERENCE 3: 137:79391  
REFERENCE 4: 137:58577  
REFERENCE 5: 137:54621  
REFERENCE 6: 137:48172  
REFERENCE 7: 137:39324  
REFERENCE 8: 137:34038  
REFERENCE 9: 137:33593  
REFERENCE 10: 137:33092

L24 ANSWER 4 OF 8 REGISTRY COPYRIGHT 2002 ACS

RN 110-17-8 REGISTRY

CN 2-Butenedioic acid (2E)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2-Butenedioic acid (E)-

CN Fumaric acid (8CI)

OTHER NAMES:

CN (E)-2-Butenedioic acid

CN 2-(E)-Butenedioic acid

CN 2-Butenedioic acid, (E)-

CN Allomaleic acid

CN Boletic acid

CN FC 33

CN Lichenic acid

CN trans-1,2-Ethylenedicarboxylic acid

CN trans-2-Butenedioic acid

CN trans-Butenedioic acid

FS STEREOSEARCH

MF C4 H4 O4

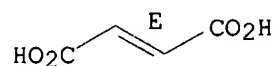
CI COM

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM\*, DIPPR\*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM\*, PIRA, PROMT, RTECS\*, SPECINFO, TOXCENTER, TULSA, USAN, USPAT2, USPATFULL, VETU, VTB  
(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

Double bond geometry as shown.



## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

8232 REFERENCES IN FILE CA (1967 TO DATE)  
1324 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
8237 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:148701  
REFERENCE 2: 137:145649  
REFERENCE 3: 137:145609  
REFERENCE 4: 137:145608  
REFERENCE 5: 137:145594  
REFERENCE 6: 137:145226  
REFERENCE 7: 137:145190  
REFERENCE 8: 137:145140  
REFERENCE 9: 137:145134  
REFERENCE 10: 137:140668

L24 ANSWER 5 OF 8 REGISTRY COPYRIGHT 2002 ACS

RN ~~110-16-7~~ REGISTRY

CN 2-Butenedioic acid (2Z)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2-Butenedioic acid (Z)-

CN Maleic acid (8CI)

OTHER NAMES:

CN 2-Butenedioic acid, (Z)-

CN cis-1,2-Ethylenedicarboxylic acid

CN cis-2-Butenedioic acid

CN cis-Butenedioic acid

CN Maleinic acid

CN Malezid CM

CN Scotchbond Multipurpose Etchant

CN Toxilic acid

FS STEREOSEARCH

MF C4 H4 O4

CI COM

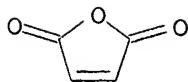
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM\*, DIPPR\*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM\*, PIRA, PROMT, RTECS\*, SPECINFO, TOXCENTER, TULSA, USPAT2, USPATFULL

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

Double bond geometry as shown.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

25041 REFERENCES IN FILE CA (1967 TO DATE)  
11643 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
25056 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
13 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:145661  
REFERENCE 2: 137:142222  
REFERENCE 3: 137:142196  
REFERENCE 4: 137:142062  
REFERENCE 5: 137:141927  
REFERENCE 6: 137:141718  
REFERENCE 7: 137:141712  
REFERENCE 8: 137:141649  
REFERENCE 9: 137:141584  
REFERENCE 10: 137:141572

L24 ANSWER 7 OF 8 REGISTRY COPYRIGHT 2002 ACS

RN 79-41-4 REGISTRY

CN 2-Propenoic acid, 2-methyl- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Methacrylic acid (8CI)

OTHER NAMES:

CN .alpha.-Methacrylic acid

CN .alpha.-Methylacrylic acid

CN 2-Methyl-2-propenoic acid

CN 2-Methylacrylic acid

CN GE 110

CN Loctite 3298

CN Methylacrylic acid

FS 3D CONCORD

MF C4 H6 O2

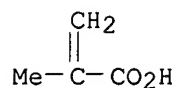
CI COM

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM\*, DIPPR\*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM\*, PIRA, PROMT, RTECS\*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL, VTB

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

14684 REFERENCES IN FILE CA (1967 TO DATE)  
8241 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
14701 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
11 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:148869  
REFERENCE 2: 137:147435  
REFERENCE 3: 137:146124  
REFERENCE 4: 137:145628  
REFERENCE 5: 137:145573  
REFERENCE 6: 137:145197  
REFERENCE 7: 137:145182  
REFERENCE 8: 137:141937  
REFERENCE 9: 137:141546  
REFERENCE 10: 137:141446

L24 ANSWER 8 OF 8 REGISTRY COPYRIGHT 2002 ACS

RN 79-10-7 REGISTRY

CN 2-Propenoic acid (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Acrylic acid (6CI, 7CI, 8CI)

OTHER NAMES:

CN Acroleic acid

CN Ethylenecarboxylic acid

CN Propenoic acid

CN Vinylformic acid

FS 3D CONCORD

DR 55927-87-2

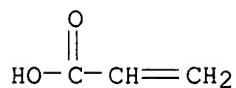
MF C3 H4 O2

CI COM

LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM\*, DIOGENES, DIPPR\*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NIOSHTIC, PDLCOM\*, PIRA, PROMT, RTECS\*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL, VTB  
(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

25196 REFERENCES IN FILE CA (1967 TO DATE)  
 15696 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 25228 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
 3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:147759  
 REFERENCE 2: 137:147757  
 REFERENCE 3: 137:147435  
 REFERENCE 4: 137:146124  
 REFERENCE 5: 137:145647  
 REFERENCE 6: 137:145573  
 REFERENCE 7: 137:145212  
 REFERENCE 8: 137:145210  
 REFERENCE 9: 137:145202  
 REFERENCE 10: 137:145197

=> d 130 tot ide can

L30 ANSWER 1 OF 6 REGISTRY COPYRIGHT 2002 ACS

RN 25322-68-3 REGISTRY

CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN .alpha.,.omega.-Hydroxypoly(ethylene oxide)  
 CN .alpha.-Hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl)  
 CN .alpha.-Hydro-.omega.-hydroxypoly(oxyethylene)  
 CN 1,2-Ethanediol, homopolymer  
 CN 16600  
 CN 1660S  
 CN Alkox  
 CN Alkox E 100  
 CN Alkox E 130  
 CN Alkox E 160  
 CN Alkox E 240  
 CN Alkox E 30  
 CN Alkox E 45  
 CN Alkox E 60  
 CN Alkox E 75  
 CN Alkox R 1000  
 CN Alkox R 15  
 CN Alkox R 150  
 CN Alkox R 400  
 CN Alkox SR<sup>~</sup>  
 CN Antarox E 4000  
 CN Aquacide III

CN Aquaaffin  
 CN Badimol  
 CN BDH 301  
 CN Bradsyn PEG  
 CN Breox 2000  
 CN Breox 20M  
 CN Breox 4000  
 CN Breox 550  
 CN Breox PEG 300  
 CN CAFO 154  
 CN Carbowax  
 CN Carbowax 100  
 CN Carbowax 1000  
 CN Carbowax 1350  
 CN Carbowax 14000  
 CN Carbowax 1500  
 CN Carbowax 1540  
 CN Carbowax 20  
 CN Carbowax 200  
 CN Carbowax 20000  
 CN Carbowax 25000  
 CN Carbowax 300  
 CN Carbowax 3350  
 CN Carbowax 400  
 CN Carbowax 4000  
 CN Carbowax 4500  
 CN Carbowax 4600  
 CN Carbowax 600

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for DISPLAY.

AR 9002-90-8  
 DR 12676-74-3, 12770-93-3, 9081-95-2, 9085-02-3, 9085-03-4, 54510-95-1,  
 125223-68-9, 54847-64-2, 59763-40-5, 64441-68-5, 64640-28-4, 133573-31-6,  
 25104-58-9, 25609-81-8, 134919-43-0, 101677-86-5, 99264-61-6, 106186-24-7,  
 112895-21-3, 114323-93-2, 50809-04-6, 50809-59-1, 119219-06-6, 60894-12-4,  
 61840-14-0, 37361-15-2, 112384-37-9, 70926-57-7, 75285-02-8, 75285-03-9,  
 77986-38-0, 150872-82-5, 154394-38-4, 79964-26-4, 80341-53-3, 85399-22-0,  
 85945-29-5, 88747-22-2, 34802-42-1, 107502-63-6, 107529-96-4, 116549-90-7,  
 156948-19-5, 169046-53-1, 188364-77-4, 188924-03-0, 189154-62-9,  
 191743-71-2, 201163-43-1, 206357-86-0, 221638-71-7, 225502-44-3,  
 270910-26-4, 307928-07-0, 356055-70-4, 391229-98-4

MF (C2 H4 O)<sub>n</sub> H2 O

CI PMS, COM

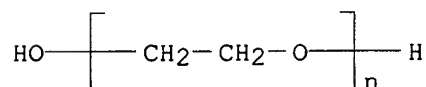
PCT Polyether

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BIOBUSINESS, BIOSIS,  
 BIOTECHNO, CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS,  
 CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM\*,  
 DIOGENES, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2,  
 HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NIOSHTIC,  
 PDLCOM\*, PIRA, PROMT, RTECS\*, SPECINFO, TOXCENTER, TULSA, ULIDAT, USAN,  
 USPAT2, USPATFULL, VETU, VTB

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, TSCA\*\*, WHO

(\*\*Enter CHEMLIST File for up-to-date regulatory information)



62515 REFERENCES IN FILE CA (1967 TO DATE)

16773 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

REFERENCE 4: 137:109056

REFERENCE 5: 137:95349

REFERENCE 6: 137:68054

REFERENCE 7: 137:65540

REFERENCE 8: 137:65393

REFERENCE 9: 137:63573

REFERENCE 10: 137:63248

L30 ANSWER 3 OF 6 REGISTRY COPYRIGHT 2002 ACS

RN 102-71-6 REGISTRY

CN Ethanol, 2,2',2''-nitrilotris- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Ethanol, 2,2',2''-nitrilotri- (8CI)

OTHER NAMES:

CN 2,2',2''-Nitrilotriethanol

CN 2,2',2''-Nitrilotris[ethanol]

CN Alkanolamine 244

CN Biafine

CN Daltogen

CN Nitrilotriethanol

CN Sterolamide

CN Sting-Kill

CN TEA

CN TEA (amino alcohol)

CN TEOA

CN Triethanolamin

CN Triethanolamine

CN Tris(.beta.-hydroxyethyl)amine

CN Tris(2-hydroxyethyl)amine

CN tris-(2-Hydroxyethyl)amine

CN Trolamine

FS 3D CONCORD

DR 126068-67-5, 105655-27-4, 36549-53-8, 36549-54-9, 36549-55-0, 36659-79-7

MF C6 H15 N O3

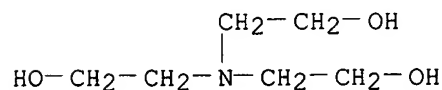
CI COM

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM\*, DIOGENES, DIPPR\*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NIOSHTIC, PDLCOM\*, PIRA, PROMT, RTECS\*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VTB

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*



13714 REFERENCES IN FILE CA (1967 TO DATE)  
1732 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
13721 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
39 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:147756

REFERENCE 2: 137:147754

REFERENCE 3: 137:147674

REFERENCE 4: 137:145632

REFERENCE 5: 137:145364

REFERENCE 6: 137:145232

REFERENCE 7: 137:145185

REFERENCE 8: 137:144332

REFERENCE 9: 137:143928

REFERENCE 10: 137:143397

L30 ANSWER 4 OF 6 REGISTRY COPYRIGHT 2002 ACS

RN 100-37-8 REGISTRY

CN Ethanol, 2-(diethylamino)- (8CI, 9CI) (CA INDEX NAME)

OTHER NAMES:

CN (2-Hydroxyethyl)diethylamine

CN (Diethylamino)ethanol

CN .beta.-(Diethylamino)ethanol

CN 2-(Diethylamino)ethanol

CN 2-(Diethylamino)ethyl alcohol

CN 2-(N,N-Diethylamino)ethanol

CN 2-Hydroxytriethylamine

CN DEAE

CN DEEA

CN Diethyl(.beta.-hydroxyethyl)amine

CN Diethylethanolamine

CN Diethylmonoethanolamine

CN MKS

CN N,N-Diethyl(2-hydroxyethyl)amine

CN N,N-Diethyl-2-aminoethanol

CN N,N-Diethylethanolamine

CN N,N-Diethylmonoethanolamine

CN N-(2-Hydroxyethyl)diethylamine

CN Pennad 150

FS 3D CONCORD

DR 102802-00-6

MF C6 H15 N O

CI COM

LC STN Files: ANABSTR, AQUIRE, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO,  
CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX,  
CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM\*, DIPPR\*, DRUGU,  
EMBASE, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE,  
MRCK\*, MSDS-OHS, NIOSHTIC, PIRA, PROMT, RTECS\*, SPECINFO, SYNTHLINE,  
TOXCENTER, ULIDAT, USPAT2, USPATFULL

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

Et<sub>2</sub>N-CH<sub>2</sub>-CH<sub>2</sub>-OH

**\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\***

1862 REFERENCES IN FILE CA (1967 TO DATE)  
211 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
1865 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
30 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:142002

REFERENCE 2: 137:140822

REFERENCE 3: 137:140276

REFERENCE 4: 137:137069

REFERENCE 5: 137:119680

REFERENCE 6: 137:108980

REFERENCE 7: 137:102407

REFERENCE 8: 137:59913

REFERENCE 9: 137:50198

REFERENCE 10: 137:27052

L30 ANSWER 5 OF 6 REGISTRY COPYRIGHT 2002 ACS

RN 75-21-8 REGISTRY

CN Oxirane (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Ethylene oxide (8CI)

CN Ethyleneoxy (6CI)

OTHER NAMES:

CN 1,2-Epoxyethane

CN 12/88

CN Ciba-Geigy 9138

CN Dihydrooxirene

CN Dimethylene oxide

CN Epoxyethane

CN Ethene oxide

CN ETO

CN Mirror Ox

CN Oxacyclopropane

CN Oxane

CN Oxidoethane

CN Oxirene, dihydro-

CN Oxyfume

CN Oxyfume 12

CN T-Gas

FS 3D CONCORD

DR 19034-08-3, 37341-05-2, 99932-75-9, 184288-32-2

MF C2 H4 O

CI COM, RPS

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM\*, DIPPR\*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA,

MEDLINE, MRCK\*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM\*, PIRA, PROMT,  
RTECS\*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USPAT2,  
USPATFULL, VETU, VTB

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)



**\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\***

12882 REFERENCES IN FILE CA (1967 TO DATE)  
2856 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
12890 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
12 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:147714

REFERENCE 2: 137:145670

REFERENCE 3: 137:145199

REFERENCE 4: 137:142197

REFERENCE 5: 137:140827

REFERENCE 6: 137:140778

REFERENCE 7: 137:137393

REFERENCE 8: 137:129062

REFERENCE 9: 137:126836

REFERENCE 10: 137:126833

L30 ANSWER 6 OF 6 REGISTRY COPYRIGHT 2002 ACS

RN 56-81-5 REGISTRY

CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Glycerol (8CI)

CN Propanetriol (7CI)

OTHER NAMES:

CN 1,2,3-Trihydroxypropane

CN Glycerin

CN Glycerine

CN Glyceritol

CN Glycyl alcohol

CN Glyrol

CN Glysanin

CN Osmoglyn

CN Pricerine 9091

CN Trihydroxypropane

AR 30918-77-5

FS 3D CONCORD

DR 8013-25-0, 37228-54-9, 75398-78-6, 78630-16-7, 29796-42-7, 30049-52-6

MF C3 H8 O3

CI COM

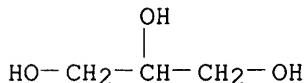
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOBUSINESS,

BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM\*, DIOGENES, DIPPR\*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM\*, PHARMASEARCH, PIRA, PROMT, RTECS\*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VETU, VTB

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*, WHO

(\*\*Enter CHEMLIST File for up-to-date regulatory information)



**\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\***

44111 REFERENCES IN FILE CA (1967 TO DATE)  
 4612 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 44166 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:148859  
 REFERENCE 2: 137:147616  
 REFERENCE 3: 137:146919  
 REFERENCE 4: 137:145993  
 REFERENCE 5: 137:145667  
 REFERENCE 6: 137:145650  
 REFERENCE 7: 137:145649  
 REFERENCE 8: 137:145618  
 REFERENCE 9: 137:145612  
 REFERENCE 10: 137:145609

=> d 189 ide can tot

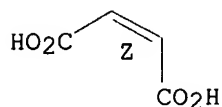
L89 ANSWER 1 OF 155 REGISTRY COPYRIGHT 2002 ACS  
 RN 436810-37-6 REGISTRY  
 CN 2-Butenedioic acid (2Z)-, potassium salt, polymer with 2-methyl-1-propene  
 (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF (C4 H8 . C4 H4 O4 . x K)x  
 CI PMS  
 PCT Polyolefin, Polyvinyl  
 SR CA  
 LC STN Files: CA, CAPLUS

CM 1

CRN 10237-70-4 (110-16-7)  
 CMF C4 H4 O4 . x K

Jan Delaval  
Reference Librarian  
Biotechnology & Chemical Library  
CM1 1E07 - 703-308-4498  
jan.delaval@uspto.gov

Double bond geometry as shown.

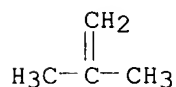


●x K

CM 2

CRN 115-11-7

CMF C4 H8



1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 137:33983

L89 ANSWER 2 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 431946-68-8 REGISTRY

CN 2-Propenoic acid, polymer with 2-methyl-1-propene, alternating, block  
(9CI) (CA INDEX NAME)

OTHER NAMES:

CN Acrylic acid-isobutylene alternating block copolymer

MF (C4 H8 . C3 H4 O2)x

CI PMS

PCT Polyacrylic, Polyolefin

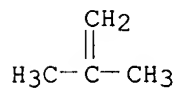
SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 115-11-7

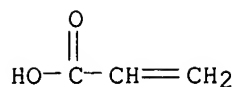
CMF C4 H8



CM 2

CRN 79-10-7

CMF C3 H4 O2



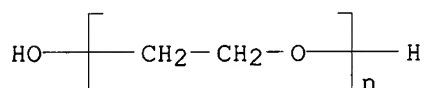
1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:403175

L89 ANSWER 3 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 355117-35-0 REGISTRY  
CN 2,5-Furandione, polymer with .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) and 1-propene, graft (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1-Propene, polymer with 2,5-furandione and .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl), graft (9CI)  
CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, polymer with 2,5-furandione and 1-propene, graft (9CI)  
OTHER NAMES:  
CN Maleic anhydride-polyethylene glycol-propylene graft copolymer  
MF (C4 H2 O3 . C3 H6 . (C2 H4 O)n H2 O)x  
CI PMS  
PCT Polyester, Polyester formed, Polyether, Polyolefin, Polyvinyl  
SR CA  
LC STN Files: CA, CAPLUS

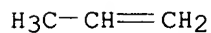
CM 1

CRN 25322-68-3  
CMF (C2 H4 O)n H2 O  
CCI PMS



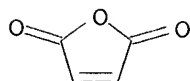
CM 2

CRN 115-07-1  
CMF C3 H6



CM 3

CRN 108-31-6  
CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)

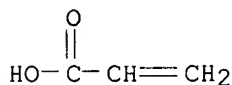
## 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 135:181199

L89 ANSWER 4 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 345296-06-2 REGISTRY  
CN Oxirane, polymer with ethene, 2-propenoate, block (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Ethene, polymer with oxirane, 2-propenoate, block (9CI)  
MF C3 H4 O2 . x (C2 H4 O . C2 H4)x  
PCT Polyether, Polyether formed, Polyolefin  
SR CA  
LC STN Files: CA, CAPLUS

CM 1

CRN 79-10-7  
CMF C3 H4 O2



CM 2

CRN 126140-91-8  
CMF (C2 H4 O . C2 H4)x  
CCI PMS

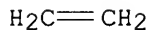
CM 3

CRN 75-21-8  
CMF C2 H4 O



CM 4

CRN 74-85-1  
CMF C2 H4



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

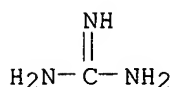
REFERENCE 1: 135:61608

L89 ANSWER 5 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 339990-00-0 REGISTRY  
CN 2,5-Furandione, polymer with 2-methyl-1-propene, compd. with guanidine, ammonium salt (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, compd. with guanidine,  
ammonium salt (9CI)  
MF (C4 H8 . C4 H2 O3)x . x C H5 N3 . x H3 N  
PCT Polyolefin, Polyvinyl  
SR CA  
LC STN Files: CA, CAPLUS

CM 1

CRN 113-00-8  
CMF C H5 N3

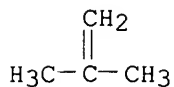


CM 2

CRN 26426-80-2  
CMF (C4 H8 . C4 H2 O3)x  
CCI PMS

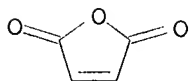
CM 3

CRN 115-11-7  
CMF C4 H8



CM 4

CRN 108-31-6  
CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 134:374103

L89 ANSWER 6 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 317802-93-0 REGISTRY

CN 2-Propenoic acid, polymer with ethene, 2-(diethylamino)ethyl ester (9CI)  
(CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Ethene, polymer with 2-propenoic acid, 2-(diethylamino)ethyl ester (9CI)

OTHER NAMES:

CN Ethylene-acrylic acid copolymer ester with diethylaminoethanol

MF C6 H15 N O . x (C3 H4 O2 . C2 H4)x

PCT Polyacrylic, Polyolefin



SR CA  
LC STN Files: CA, CAPLUS

CM 1

CRN 100-37-8  
CMF C6 H15 N O

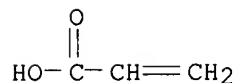
Et<sub>2</sub>N-CH<sub>2</sub>-CH<sub>2</sub>-OH

CM 2

CRN 9010-77-9  
CMF (C3 H4 O2 . C2 H4)x  
CCI PMS

CM 3

CRN 79-10-7  
CMF C3 H4 O2



CM 4

CRN 74-85-1  
CMF C2 H4



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 134:86667

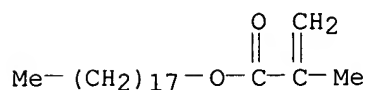
L89 ANSWER 7 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 263025-15-6 REGISTRY  
CN 2-Propenoic acid, 2-methyl-, octadecyl ester, polymer with 2,5-furandione and 2-methyl-1-propene, ammonium salt (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1-Propene, 2-methyl-, polymer with 2,5-furandione and octadecyl 2-methyl-2-propenoate, ammonium salt (9CI)  
CN 2,5-Furandione, polymer with 2-methyl-1-propene and octadecyl 2-methyl-2-propenoate, ammonium salt (9CI)  
OTHER NAMES:  
CN Isobutylene-maleic anhydride-stearyl methacrylate copolymer ammonium salt  
MF (C22 H42 O2 . C4 H8 . C4 H2 O3)x . x H3 N  
PCT Polyacrylic, Polyolefin, Polyvinyl  
SR CA  
LC STN Files: CA, CAPLUS

CM 1

CRN 263025-14-5  
 CMF (C22 H42 O2 . C4 H8 . C4 H2 O3)x  
 CCI PMS

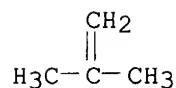
CM 2

CRN 32360-05-7  
 CMF C22 H42 O2



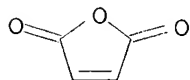
CM 3

CRN 115-11-7  
 CMF C4 H8



CM 4

CRN 108-31-6  
 CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 132:252251

L89 ANSWER 8 OF 155 REGISTRY COPYRIGHT 2002 ACS  
 RN 263025-13-4 REGISTRY  
 CN 2-Propenoic acid, 2-methyl-, hexyl ester, polymer with 2,5-furandione and 2-methyl-1-propene, ammonium salt (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 1-Propene, 2-methyl-, polymer with 2,5-furandione and hexyl 2-methyl-2-propenoate, ammonium salt (9CI)  
 CN 2,5-Furandione, polymer with hexyl 2-methyl-2-propenoate and 2-methyl-1-propene, ammonium salt (9CI)  
 OTHER NAMES:  
 CN Hexyl methacrylate-isobutylene-maleic anhydride copolymer ammonium salt  
 MF (C10 H18 O2 . C4 H8 . C4 H2 O3)x . x H3 N  
 PCT Polyacrylic, Polyolefin, Polyvinyl  
 SR CA  
 LC STN Files: CA, CAPLUS

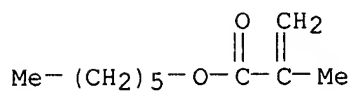
CM 1

CRN 263025-12-3

CMF (C10 H18 O2 . C4 H8 . C4 H2 O3)x  
CCI PMS

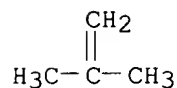
CM 2

CRN 142-09-6  
CMF C10 H18 O2



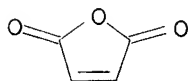
CM 3

CRN 115-11-7  
CMF C4 H8



CM 4

CRN 108-31-6  
CMF C4 H2 O3



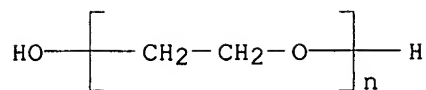
1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 132:252251

L89 ANSWER 9 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 223463-61-4 REGISTRY  
CN 2,5-Furandione, polymer with .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) and 2-methyl-1-propene, graft (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1-Propene, 2-methyl-, polymer with 2,5-furandione and .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl), graft (9CI)  
CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, polymer with 2,5-furandione and 2-methyl-1-propene, graft (9CI)  
MF (C4 H8 . C4 H2 O3 . (C2 H4 O)n H2 O)x  
CI PMS  
PCT Polyester, Polyester formed, Polyether, Polyolefin, Polyvinyl  
SR CA  
LC STN Files: CA, CAPLUS

CM 1

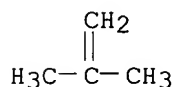
CRN 25322-68-3  
CMF (C2 H4 O)n H2 O  
CCI PMS



CM 2

CRN 115-11-7

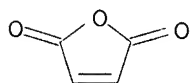
CMF C4 H8



CM 3

CRN 108-31-6

CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 130:300554

L89 ANSWER 10 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 221347-89-3 REGISTRY

CN 2-Propenoic acid, polymer with dihydro-2,5-furandione, 2,5-furandione and .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl), graft, sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2,5-Furandione, dihydro-, polymer with 2,5-furandione, .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) and 2-propenoic acid, graft, sodium salt (9CI)

CN 2,5-Furandione, polymer with dihydro-2,5-furandione, .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) and 2-propenoic acid, graft, sodium salt (9CI)

CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, polymer with dihydro-2,5-furandione, 2,5-furandione and 2-propenoic acid, graft, sodium salt (9CI)

MF (C4 H4 O3 . C4 H2 O3 . C3 H4 O2 . (C2 H4 O)n H2 O)x . x Na

PCT Polyacrylic, Polyester, Polyester formed, Polyether, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS

CM 1

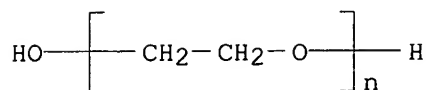
CRN 221347-88-2

CMF (C4 H4 O3 . C4 H2 O3 . C3 H4 O2 . (C2 H4 O)n H2 O)x

CCI PMS

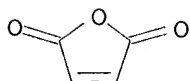
CM 2

CRN 25322-68-3  
 CMF (C2 H4 O)<sub>n</sub> H2 O  
 CCI PMS



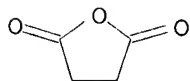
CM 3

CRN 108-31-6  
 CMF C4 H2 O3



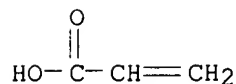
CM 4

CRN 108-30-5  
 CMF C4 H4 O3



CM 5

CRN 79-10-7  
 CMF C3 H4 O2



1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 130:241139

L89 ANSWER 11 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 221347-88-2 REGISTRY

CN 2-Propenoic acid, polymer with dihydro-2,5-furandione, 2,5-furandione and .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2,5-Furandione, dihydro-, polymer with 2,5-furandione, .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) and 2-propenoic acid, graft (9CI)

CN 2,5-Furandione, polymer with dihydro-2,5-furandione, .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) and 2-propenoic acid, graft (9CI)

CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, polymer with dihydro-2,5-furandione, 2,5-furandione and 2-propenoic acid, graft (9CI)

## OTHER NAMES:

CN Acrylic acid-maleic anhydride-polyethylene glycol-succinic anhydride graft copolymer

MF (C4 H4 O3 . C4 H2 O3 . C3 H4 O2 . (C2 H4 O)n H2 O)x

CI PMS, COM

PCT Polyacrylic, Polyester, Polyester formed, Polyether, Polyvinyl

SR CA

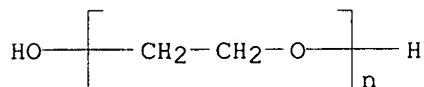
LC STN Files: CA, CAPLUS

CM 1

CRN 25322-68-3

CMF (C2 H4 O)n H2 O

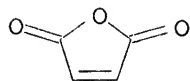
CCI PMS



CM 2

CRN 108-31-6

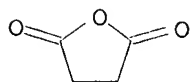
CMF C4 H2 O3



CM 3

CRN 108-30-5

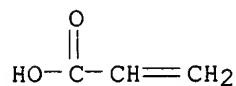
CMF C4 H4 O3



CM 4

CRN 79-10-7

CMF C3 H4 O2



1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:275746

L89 ANSWER 12 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 221347-87-1 REGISTRY

CN 2-Butenedioic acid (2Z)-, polymer with dihydro-2,5-furandione, .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2,5-Furandione, dihydro-, polymer with (2Z)-2-butenedioic acid, .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) and 2-propenoic acid, graft (9CI)

CN 2-Propenoic acid, polymer with (2Z)-2-butenedioic acid, dihydro-2,5-furandione and .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl), graft (9CI)

CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, polymer with (2Z)-2-butenedioic acid, dihydro-2,5-furandione and 2-propenoic acid, graft (9CI)

FS STEREOSEARCH

MF (C4 H4 O4 . C4 H4 O3 . C3 H4 O2 . (C2 H4 O)n H2 O)x

CI PMS

PCT Polyacrylic, Polyester, Polyester formed, Polyether, Polyvinyl

SR CA

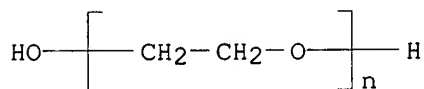
LC STN Files: CA, CAPLUS

CM 1

CRN 25322-68-3

CMF (C2 H4 O)n H2 O

CCI PMS

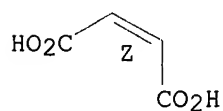


CM 2

CRN 110-16-7

CMF C4 H4 O4

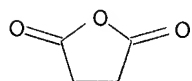
Double bond geometry as shown.



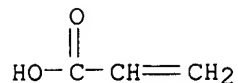
CM 3

CRN 108-30-5

CMF C4 H4 O3



CM 4

CRN 79-10-7  
CMF C3 H4 O21 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

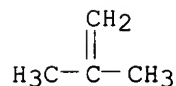
REFERENCE 1: 130:241139

L89 ANSWER 13 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 218166-08-6 REGISTRY  
CN 2,5-Furandione, polymer with 2-methyl-1-propene, block, ammonium salt  
(9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, block, ammonium salt  
(9CI)  
MF (C4 H8 . C4 H2 O3)x . x H3 N  
PCT Polyolefin, Polyvinyl  
SR CA  
LC STN Files: CA, CAPLUS

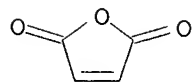
CM 1

CRN 218166-07-5  
CMF (C4 H8 . C4 H2 O3)x  
CCI PMS

CM 2

CRN 115-11-7  
CMF C4 H8

CM 3

CRN 108-31-6  
CMF C4 H2 O31 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 130:67589

L89 ANSWER 14 OF 155 REGISTRY COPYRIGHT 2002 ACS



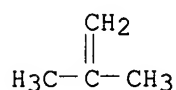
RN 218166-07-5 REGISTRY  
CN 2,5-Furandione, polymer with 2-methyl-1-propene, block (9CI) (CA INDEX NAME)

## OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, block (9CI)  
MF (C4 H8 . C4 H2 O3)x  
CI PMS, COM  
PCT Polyolefin, Polyvinyl  
SR CA

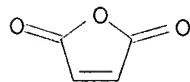
CM 1

CRN 115-11-7  
CMF C4 H8



CM 2

CRN 108-31-6  
CMF C4 H2 O3



L89 ANSWER 15 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 213197-91-2 REGISTRY  
CN 2-Propenoic acid, 2-methyl-, polymer with 2-methyl-1-propene, block (9CI)  
(CA INDEX NAME)

## OTHER CA INDEX NAMES:

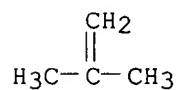
CN 1-Propene, 2-methyl-, polymer with 2-methyl-2-propenoic acid, block (9CI)

## OTHER NAMES:

CN Isobutylene-methacrylic acid block copolymer  
MF (C4 H8 . C4 H6 O2)x  
CI PMS  
PCT Polyacrylic, Polyolefin  
SR CA  
LC STN Files: CA, CAPLUS

CM 1

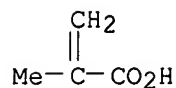
CRN 115-11-7  
CMF C4 H8



CM 2

CRN 79-41-4

CMF C4 H6 O2



3 REFERENCES IN FILE CA (1967 TO DATE)  
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 133:322360

REFERENCE 2: 129:290454

REFERENCE 3: 129:245580

L89 ANSWER 16 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 213031-80-2 REGISTRY

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2,5-furandione and  
2-methyl-1-propene, sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione and methyl  
2-methyl-2-propenoate, sodium salt (9CI)

CN 2,5-Furandione, polymer with methyl 2-methyl-2-propenoate and  
2-methyl-1-propene, sodium salt (9CI)

MF (C5 H8 O2 . C4 H8 . C4 H2 O3)x . x Na

PCT Polyacrylic, Polyolefin, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 105995-60-6

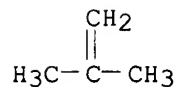
CMF (C5 H8 O2 . C4 H8 . C4 H2 O3)x

CCI PMS

CM 2

CRN 115-11-7

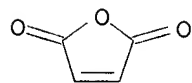
CMF C4 H8



CM 3

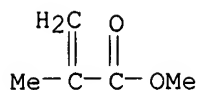
CRN 108-31-6

CMF C4 H2 O3



CM 4

CRN 80-62-6  
CMF C5 H8 O2



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 129:252524

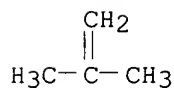
L89 ANSWER 17 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 213031-78-8 REGISTRY  
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2,5-furandione and 2-methyl-1-propene, ammonium salt (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1-Propene, 2-methyl-, polymer with 2,5-furandione and methyl 2-methyl-2-propenoate, ammonium salt (9CI)  
CN 2,5-Furandione, polymer with methyl 2-methyl-2-propenoate and 2-methyl-1-propene, ammonium salt (9CI)  
MF (C5 H8 O2 . C4 H8 . C4 H2 O3)x . x H3 N  
PCT Polyacrylic, Polyolefin, Polyvinyl  
SR CA  
LC STN Files: CA, CAPLUS

CM 1

CRN 105995-60-6  
CMF (C5 H8 O2 . C4 H8 . C4 H2 O3)x  
CCI PMS

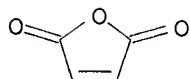
CM 2

CRN 115-11-7  
CMF C4 H8



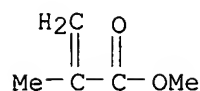
CM 3

CRN 108-31-6  
CMF C4 H2 O3



CM 4

CRN 80-62-6  
CMF C5 H8 O2



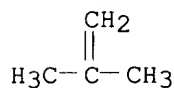
1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 129:252524

L89 ANSWER 18 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 212006-66-1 REGISTRY  
CN Butanedioic acid, polymer with 2-methyl-1-propene (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1-Propene, 2-methyl-, polymer with butanedioic acid (9CI)  
MF (C4 H8 . C4 H6 O4)x  
CI PMS  
PCT Polyolefin, Polyother  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL

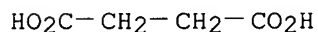
CM 1

CRN 115-11-7  
CMF C4 H8



CM 2

CRN 110-15-6  
CMF C4 H6 O4



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

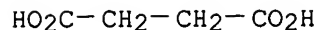
REFERENCE 1: 129:205088

L89 ANSWER 19 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 210491-61-5 REGISTRY  
CN Butanedioic acid, monoester with 1,2,3-propanetriol mono(2-methyl-2-propenoate) mono-2-propenoate (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN Glycerol acrylate methacrylate succinate half-ester  
MF C14 H18 O8  
CI IDS  
SR CA  
LC STN Files: CA, CAPLUS

CM 1

CRN 110-15-6

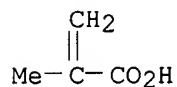
CMF C4 H6 O4



CM 2

CRN 79-41-4

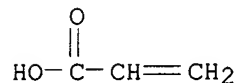
CMF C4 H6 O2



CM 3

CRN 79-10-7

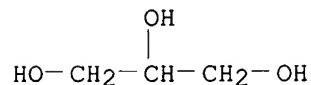
CMF C3 H4 O2



CM 4

CRN 56-81-5

CMF C3 H8 O3



1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 129:137515

L89 ANSWER 20 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 205437-70-3 REGISTRY

CN 2-Propenoic acid, butyl ester, polymer with 2,5-furandione and  
2-methyl-1-propene, sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with butyl 2-propenoate and 2,5-furandione,  
sodium salt (9CI)CN 2,5-Furandione, polymer with butyl 2-propenoate and 2-methyl-1-propene,  
sodium salt (9CI)

MF (C7 H12 O2 . C4 H8 . C4 H2 O3)x . x Na

PCT Polyacrylic, Polyolefin, Polyvinyl

SR CA

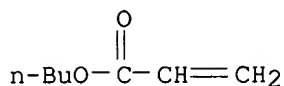
LC STN Files: CA, CAPLUS

CM 1

CRN 58413-54-0  
 CMF (C7 H12 O2 . C4 H8 . C4 H2 O3)x  
 CCI PMS

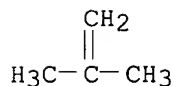
CM 2

CRN 141-32-2  
 CMF C7 H12 O2



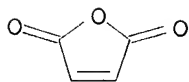
CM 3

CRN 115-11-7  
 CMF C4 H8



CM 4

CRN 108-31-6  
 CMF C4 H2 O3



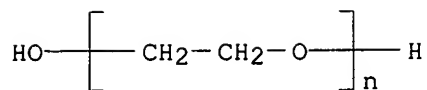
1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 128:263978

L89 ANSWER 21 OF 155 REGISTRY COPYRIGHT 2002 ACS  
 RN 204637-22-9 REGISTRY  
 CN 2,5-Furandione, polymer with ethene and .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Ethene, polymer with 2,5-furandione and .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl), graft (9CI)  
 CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, polymer with ethene and 2,5-furandione, graft (9CI)  
 MF (C4 H2 O3 . (C2 H4 O)n H2 O . C2 H4)x  
 CI PMS, COM  
 PCT Polyester, Polyester formed, Polyether, Polyolefin, Polyvinyl  
 SR CA

CM 1

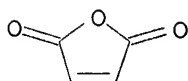
CRN 25322-68-3  
 CMF (C2 H4 O)n H2 O  
 CCI PMS



CM 2

CRN 108-31-6

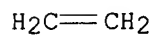
CMF C4 H2 O3



CM 3

CRN 74-85-1

CMF C2 H4



L89 ANSWER 22 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 204528-38-1 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene, ethyl ester, sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, ethyl ester, sodium salt (9CI)

MF (C4 H8 . C4 H2 O3)x . x C2 H6 O . x Na

PCT Polyolefin, Polyvinyl

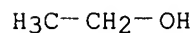
SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 64-17-5

CMF C2 H6 O



CM 2

CRN 26426-80-2

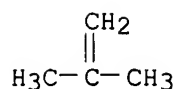
CMF (C4 H8 . C4 H2 O3)x

CCI PMS

CM 3

CRN 115-11-7

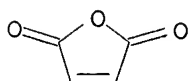
CMF C4 H8



CM 4

CRN 108-31-6

CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 128:232620

L89 ANSWER 23 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 204528-37-0 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene, methyl ester, ammonium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, methyl ester, ammonium salt (9CI)

MF (C4 H8 . C4 H2 O3)x . x C H4 O . x H3 N

PCT Polyolefin, Polyvinyl

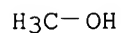
SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 67-56-1

CMF C H4 O



CM 2

CRN 26426-80-2

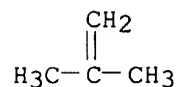
CMF (C4 H8 . C4 H2 O3)x

CCI PMS

CM 3

CRN 115-11-7

CMF C4 H8

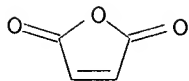




CM 4

CRN 108-31-6

CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 128:232620

L89 ANSWER 24 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 200888-50-2 REGISTRY

CN Oxirane, polymer with ethene and .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Ethene, polymer with .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) 2-methyl-2-propenoate and oxirane, graft (9CI)

CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, 2-methyl-2-propenoate, polymer with ethene and oxirane, graft (9CI)

OTHER NAMES:

CN Ethylene-ethylene oxide-polyethylene glycol methacrylate graft copolymer

MF (C4 H6 O2 . x (C2 H4 O)n H2 O . C2 H4 O . C2 H4)x

CI PMS

PCT Polyacrylic, Polyether, Polyether formed, Polyolefin

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 75-21-8

CMF C2 H4 O



CM 2

CRN 74-85-1

CMF C2 H4



CM 3

CRN 9056-77-3

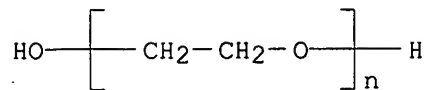
CMF C4 H6 O2 . x (C2 H4 O)n H2 O

CM 4

CRN 25322-68-3

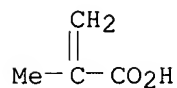
CMF (C2 H4 O)n H2 O

CCI PMS



CM 5

CRN 79-41-4  
CMF C4 H6 O2



2 REFERENCES IN FILE CA (1967 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 129:123563

REFERENCE 2: 128:89572

L89 ANSWER 25 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 196413-49-7 REGISTRY

CN 2-Propenoic acid, polymer with ethene and oxirane, graft (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Ethene, polymer with oxirane and 2-propenoic acid, graft (9CI)

CN Oxirane, polymer with ethene and 2-propenoic acid, graft (9CI)

OTHER NAMES:

CN Acrylic acid-ethylene-ethylene oxide graft copolymer

MF (C3 H4 O2 . C2 H4 O . C2 H4)x

CI PMS, COM

PCT Polyacrylic, Polyether, Polyether formed, Polyolefin

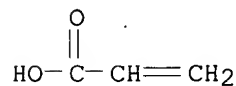
SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 79-10-7

CMF C3 H4 O2



CM 2

CRN 75-21-8

CMF C2 H4 O



CM 3

CRN 74-85-1  
CMF C2 H41 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 132:94030

L89 ANSWER 26 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 196413-47-5 REGISTRY

CN 2-Propenoic acid, 2-methyl-, polymer with ethene and oxirane, methyl ether, graft (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Ethene, polymer with 2-methyl-2-propenoic acid and oxirane, methyl ether, graft (9CI)

CN Oxirane, polymer with ethene and 2-methyl-2-propenoic acid, methyl ether, graft (9CI)

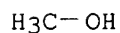
MF (C4 H6 O2 . C2 H4 O . C2 H4)x . x C H4 O

PCT Polyacrylic, Polyether, Polyether formed, Polyolefin

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 67-56-1  
CMF C H4 O

CM 2

CRN 196305-71-2

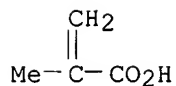
CMF (C4 H6 O2 . C2 H4 O . C2 H4)x

CCI PMS

CM 3

CRN 79-41-4

CMF C4 H6 O2



CM 4

CRN 75-21-8

CMF C2 H4 O



CM 5

CRN 74-85-1

CMF C2 H4



1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 127:294102

L89 ANSWER 27 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 196305-73-4 REGISTRY

CN 2-Propenoic acid, polymer with oxirane and 1-propene, block, graft (9CI)  
(CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, polymer with 2-propenoic acid and oxirane, block, graft (9CI)

CN Oxirane, polymer with 2-propenoic acid and 1-propene, block, graft (9CI)

MF (C3 H6 . C3 H4 O2 . C2 H4 O)x

CI PMS, COM

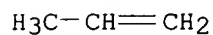
PCT Polyacrylic, Polyether, Polyether formed, Polyolefin

SR CA

CM 1

CRN 115-07-1

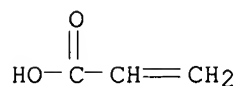
CMF C3 H6



CM 2

CRN 79-10-7

CMF C3 H4 O2



CM 3

CRN 75-21-8

CMF C2 H4 O



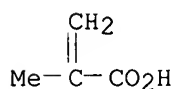
L89 ANSWER 28 OF 155 REGISTRY COPYRIGHT 2002 ACS  
 RN 196305-71-2 REGISTRY  
 CN 2-Propenoic acid, 2-methyl-, polymer with ethene and oxirane, graft (9CI)  
 (CA INDEX NAME)

## OTHER CA INDEX NAMES:

CN Ethene, polymer with 2-methyl-2-propenoic acid and oxirane, graft (9CI)  
 CN Oxirane, polymer with ethene and 2-methyl-2-propenoic acid, graft (9CI)  
 MF (C4 H6 O2 . C2 H4 O . C2 H4)x  
 CI PMS, COM  
 PCT Polyacrylic, Polyether, Polyether formed, Polyolefin  
 SR CA

CM 1

CRN 79-41-4  
 CMF C4 H6 O2



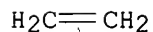
CM 2

CRN 75-21-8  
 CMF C2 H4 O



CM 3

CRN 74-85-1  
 CMF C2 H4



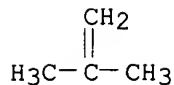
L89 ANSWER 29 OF 155 REGISTRY COPYRIGHT 2002 ACS  
 RN 195990-97-7 REGISTRY  
 CN 2,5-Furandione, polymer with 2-methyl-1-propene and 1-octadecene, sodium salt (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 1-Octadecene, polymer with 2,5-furandione and 2-methyl-1-propene, sodium salt (9CI)  
 CN 1-Propene, 2-methyl-, polymer with 2,5-furandione and 1-octadecene, sodium salt (9CI)  
 OTHER NAMES:  
 CN Isobutylene-maleic anhydride-1-octadecene copolymer sodium salt  
 MF (C18 H36 . C4 H8 . C4 H2 O3)x . x Na  
 PCT Polyolefin, Polyvinyl  
 SR CA  
 LC STN Files: CA, CAPLUS

CM 1

CRN 195990-96-6  
 CMF (C18 H36 . C4 H8 . C4 H2 O3)x  
 CCI PMS

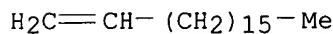
CM 2

CRN 115-11-7  
 CMF C4 H8



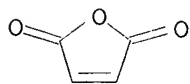
CM 3

CRN 112-88-9  
 CMF C18 H36



CM 4

CRN 108-31-6  
 CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 127:264582

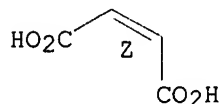
L89 ANSWER 30 OF 155 REGISTRY COPYRIGHT 2002 ACS  
 RN 195209-31-5 REGISTRY  
 CN 2-Butenedioic acid (2Z)-, polymer with ethene and 2,2',2''-nitrilotris[ethanol] (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 2-Butenedioic acid (Z)-, polymer with ethene and 2,2',2''-nitrilotris[ethanol]  
 CN Ethanol, 2,2',2''-nitrilotris-, polymer with (2Z)-2-butenedioic acid and ethene (9CI)  
 CN Ethanol, 2,2',2''-nitrilotris-, polymer with (Z)-2-butenedioic acid and ethene  
 CN Ethene, polymer with (2Z)-2-butenedioic acid and 2,2',2''-nitrilotris[ethanol] (9CI)  
 CN Ethene, polymer with (Z)-2-butenedioic acid and 2,2',2''-nitrilotris[ethanol]  
 OTHER NAMES:  
 CN Ethylene-maleic acid-triethanolamine copolymer  
 FS STEREOSEARCH  
 MF (C6 H15 N O3 . C4 H4 O4 . C2 H4)x

CI PMS  
 PCT Polyamine, Polyester, Polyester formed, Polyolefin, Polyvinyl  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL

CM 1

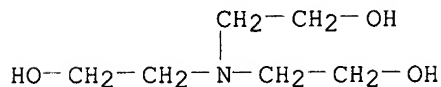
CRN 110-16-7  
 CMF C4 H4 O4

Double bond geometry as shown.



CM 2

CRN 102-71-6  
 CMF C6 H15 N O3



CM 3

CRN 74-85-1  
 CMF C2 H4

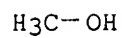


1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 127:235131

L89 ANSWER 31 OF 155 REGISTRY COPYRIGHT 2002 ACS  
 RN 193362-33-3 REGISTRY  
 CN 2-Propenoic acid, 2-methyl-, polymer with 2,5-furandione,  
 2-methyl-1-propene and oxirane, methyl ether, graft (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, 2-methyl-2-propenoic  
 acid and oxirane, methyl ether, graft (9CI)  
 CN 2,5-Furandione, polymer with 2-methyl-1-propene, 2-methyl-2-propenoic acid  
 and oxirane, methyl ether, graft (9CI)  
 CN Oxirane, polymer with 2,5-furandione, 2-methyl-1-propene and  
 2-methyl-2-propenoic acid, methyl ether, graft (9CI)  
 MF (C4 H8 . C4 H6 O2 . C4 H2 O3 . C2 H4 O)x . x C H4 O  
 PCT Polyacrylic, Polyester, Polyester formed, Polyether, Polyether formed,  
 Polyolefin, Polyvinyl  
 SR CA  
 LC STN Files: CA, CAPLUS  
 CM 1

CRN 67-56-1  
CMF C H4 O

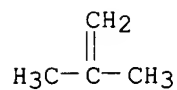


CM 2

CRN 193154-81-3  
CMF (C4 H8 . C4 H6 O2 . C4 H2 O3 . C2 H4 O) x  
CCI PMS

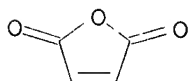
CM 3

CRN 115-11-7  
CMF C4 H8



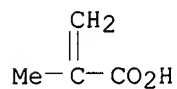
CM 4

CRN 108-31-6  
CMF C4 H2 O3



CM 5

CRN 79-41-4  
CMF C4 H6 O2



CM 6

CRN 75-21-8  
CMF C2 H4 O



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)



REFERENCE 1: 127:149545

L89 ANSWER 32 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 191175-18-5 REGISTRY

CN 2-Butenedioic acid (2Z)-, polymer with 2-methyl-1-propene and octadecene, sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with (2Z)-2-butenedioic acid and octadecene, sodium salt (9CI)

CN 1-Propene, 2-methyl-, polymer with (Z)-2-butenedioic acid and octadecene, sodium salt

CN 2-Butenedioic acid (Z)-, polymer with 2-methyl-1-propene and octadecene, sodium salt

CN Octadecene, polymer with (2Z)-2-butenedioic acid and 2-methyl-1-propene, sodium salt (9CI)

CN Octadecene, polymer with (Z)-2-butenedioic acid and 2-methyl-1-propene, sodium salt

FS STEREOSEARCH

MF (C18 H36 . C4 H8 . C4 H4 O4)x . x Na

PCT Polyolefin, Polyether, Polyvinyl

SR CAS Registry Services

LC STN Files: CHEMLIST

CM 1

CRN 191175-17-4

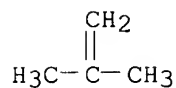
CMF (C18 H36 . C4 H8 . C4 H4 O4)x

CCI PMS

CM 2

CRN 115-11-7

CMF C4 H8

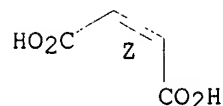


CM 3

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



CM 4

CRN 27070-58-2

CMF C18 H36

CCI IDS

CM 5

CRN 593-45-3  
CMF C18 H38

Me-(CH<sub>2</sub>)<sub>16</sub>-Me

L89 ANSWER 33 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 190454-10-5 REGISTRY

CN 2-Butenedioic acid (2Z)-, polymer with 2-methyl-1-propene and  
1-octadecene, sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Octadecene, polymer with (2Z)-2-butenedioic acid and 2-methyl-1-propene,  
sodium salt (9CI)

CN 1-Octadecene, polymer with (Z)-2-butenedioic acid and 2-methyl-1-propene,  
sodium salt

CN 1-Propene, 2-methyl-, polymer with (2Z)-2-butenedioic acid and  
1-octadecene, sodium salt (9CI)

CN 1-Propene, 2-methyl-, polymer with (Z)-2-butenedioic acid and  
1-octadecene, sodium salt

CN 2-Butenedioic acid (Z)-, polymer with 2-methyl-1-propene and 1-octadecene,  
sodium salt

FS STEREOSEARCH

MF (C18 H36 . C4 H8 . C4 H4 O4)x . x Na

PCT Polyolefin, Polyvinyl

SR CAS Registry Services

CM 1

CRN 190454-09-2

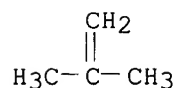
CMF (C18 H36 . C4 H8 . C4 H4 O4)x

CCI PMS

CM 2

CRN 115-11-7

CMF C4 H8



CM 3

CRN 112-88-9

CMF C18 H36

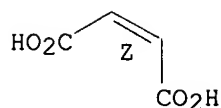
H<sub>2</sub>C=CH-(CH<sub>2</sub>)<sub>15</sub>-Me

CM 4

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



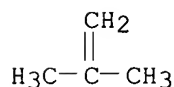
L89 ANSWER 34 OF 155 REGISTRY COPYRIGHT 2002 ACS  
 RN 180641-24-1 REGISTRY  
 CN 2,5-Furandione, polymer with 2-methyl-1-propene, alternating, ammonium salt (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, alternating, ammonium salt (9CI)  
 MF (C4 H8 . C4 H2 O3)x . x H3 N  
 PCT Polyolefin, Polyvinyl  
 SR CA  
 LC STN Files: CA, CAPLUS

CM 1

CRN 110171-93-2  
 CMF (C4 H8 . C4 H2 O3)x  
 CCI PMS

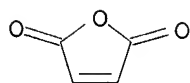
CM 2

CRN 115-11-7  
 CMF C4 H8



CM 3

CRN 108-31-6  
 CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 125:181467

L89 ANSWER 35 OF 155 REGISTRY COPYRIGHT 2002 ACS  
 RN 169952-27-6 REGISTRY  
 CN 2-Propenoic acid, butyl ester, polymer with 2,5-furandione and 2-methyl-1-propene, zinc salt (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 1-Propene, 2-methyl-, polymer with butyl 2-propenoate and 2,5-furandione, zinc salt (9CI)  
 CN 2,5-Furandione, polymer with butyl 2-propenoate and 2-methyl-1-propene, zinc salt (9CI)

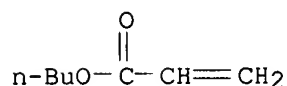
MF (C7 H12 O2 . C4 H8 . C4 H2 O3)x . x Zn  
 PCT Polyacrylic, Polyolefin, Polyvinyl  
 SR CA  
 LC STN Files: CA, CAPLUS

CM 1

CRN 58413-54-0  
 CMF (C7 H12 O2 . C4 H8 . C4 H2 O3)x  
 CCI PMS

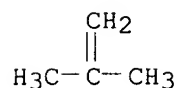
CM 2

CRN 141-32-2  
 CMF C7 H12 O2



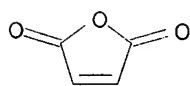
CM 3

CRN 115-11-7  
 CMF C4 H8



CM 4

CRN 108-31-6  
 CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 123:288220

L89 ANSWER 36 OF 155 REGISTRY COPYRIGHT 2002 ACS  
 RN 169952-26-5 REGISTRY  
 CN 2-Propenoic acid, butyl ester, polymer with 2,5-furandione and  
 2-methyl-1-propene, magnesium salt (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 1-Propene, 2-methyl-, polymer butyl 2-propenoate and 2,5-furandione,  
 magnesium salt (9CI)  
 CN 2,5-Furandione, polymer with butyl 2-propenoate and 2-methyl-1-propene,  
 magnesium salt (9CI)  
 MF (C7 H12 O2 . C4 H8 . C4 H2 O3)x . x Mg  
 PCT Polyacrylic, Polyolefin, Polyvinyl  
 SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 58413-54-0

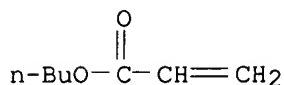
CMF (C7 H12 O2 . C4 H8 . C4 H2 O3)x

CCI PMS

CM 2

CRN 141-32-2

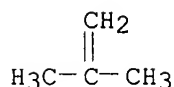
CMF C7 H12 O2



CM 3

CRN 115-11-7

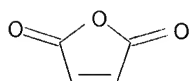
CMF C4 H8



CM 4

CRN 108-31-6

CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 123:288220

L89 ANSWER 37 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 168980-03-8 REGISTRY

CN 2,5-Furandione, polymer with ethene and oxirane, graft (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Ethene, polymer with 2,5-furandione and oxirane, graft (9CI)

CN Oxirane, polymer with ethene and 2,5-furandione, graft (9CI)

OTHER NAMES:

CN Ethylene-ethylene oxide-maleic anhydride graft copolymer

CN Ethylene-maleic anhydride-oxirane graft copolymer

MF (C4 H2 O3 . C2 H4 O . C2 H4)x

CI PMS, COM

PCT Polyester, Polyester formed, Polyether, Polyether formed, Polyolefin, Polyvinyl

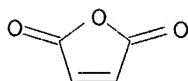
SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 108-31-6

CMF C4 H2 O3



CM 2

CRN 75-21-8

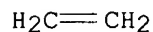
CMF C2 H4 O



CM 3

CRN 74-85-1

CMF C2 H4



2 REFERENCES IN FILE CA (1967 TO DATE)  
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 129:5132

REFERENCE 2: 123:287803

L89 ANSWER 38 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 162414-22-4 REGISTRY

CN 2-Propenoic acid, 2-methyl-, monoester with 1,2,3-propanetriol, polymer  
with ethene, graft (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Ethene, polymer with 1,2,3-propanetriol mono(2-methyl-2-propenoate), graft  
(9CI)

MF (C7 H12 O4 . C2 H4)x

CI PMS

PCT Polyacrylic, Polyester, Polyolefin, Polyother

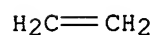
SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 74-85-1

CMF C2 H4

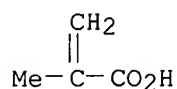


CM 2

CRN 50853-28-6  
CMF C7 H12 O4  
CCI IDS

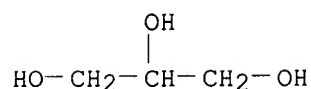
CM 3

CRN 79-41-4  
CMF C4 H6 O2



CM 4

CRN 56-81-5  
CMF C3 H8 O3



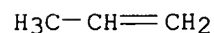
1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 122:241853

L89 ANSWER 39 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 162024-58-0 REGISTRY  
CN 2-Propenoic acid, 2-methyl-, monoester with 1,2,3-propanetriol, polymer  
with 1-propene, graft (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1-Propene, polymer with 1,2,3-propanetriol mono(2-methyl-2-propenoate),  
graft (9CI)  
MF (C7 H12 O4 . C3 H6)x  
CI PMS  
PCT Polyacrylic, Polyester, Polyolefin, Polyother  
SR CA  
LC STN Files: CA, CAPLUS

CM 1

CRN 115-07-1  
CMF C3 H6



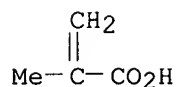
CM 2

CRN 50853-28-6  
CMF C7 H12 O4

CCI IDS

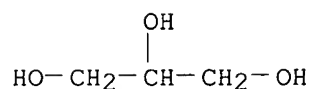
CM 3

CRN 79-41-4  
CMF C4 H6 O2



CM 4

CRN 56-81-5  
CMF C3 H8 O3



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 122:215888

L89 ANSWER 40 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 160098-09-9 REGISTRY

CN 2,5-Furandione, polymer with dihydro-2,5-furandione and oxirane (9CI) (CA  
INDEX NAME)

OTHER CA INDEX NAMES:

CN 2,5-Furandione, dihydro-, polymer with 2,5-furandione and oxirane (9CI)

CN Oxirane, polymer with dihydro-2,5-furandione and 2,5-furandione (9CI)

OTHER NAMES:

CN Ethylene oxide-maleic anhydride-succinic anhydride copolymer

MF (C4 H4 O3 . C4 H2 O3 . C2 H4 O)x

CI PMS

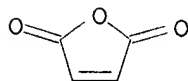
PCT Polyester, Polyester formed, Polyether, Polyether formed, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS

CM 1

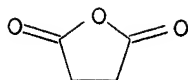
CRN 108-31-6  
CMF C4 H2 O3



CM 2

CRN 108-30-5  
CMF C4 H4 O3





CM 3

CRN 75-21-8

CMF C2 H4 O



1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 122:56741

L89 ANSWER 41 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 158908-36-2 REGISTRY

CN 2-Propenoic acid, 2-methyl-, monoester with 1,2,3-propanetriol, polymer with 1-propene (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, polymer with 1,2,3-propanetriol mono(2-methyl-2-propenoate) (9CI)

MF (C7 H12 O4 . C3 H6)x

CI PMS

PCT Polyacrylic, Polyester, Polyolefin, Polyother

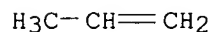
SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 115-07-1

CMF C3 H6



CM 2

CRN 50853-28-6

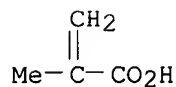
CMF C7 H12 O4

CCI IDS

CM 3

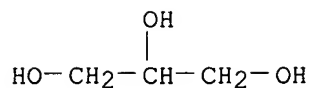
CRN 79-41-4

CMF C4 H6 O2



CM 4

CRN 56-81-5  
CMF C3 H8 O3



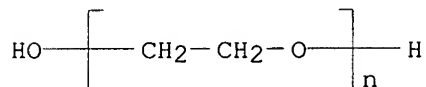
1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 121:257540

L89 ANSWER 42 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 157661-48-8 REGISTRY  
CN 2,5-Furandione, polymer with .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) and 2-methyl-1-propene (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1-Propene, 2-methyl-, polymer with 2,5-furandione and .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) (9CI)  
CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, polymer with 2,5-furandione and 2-methyl-1-propene (9CI)  
MF (C4 H8 . C4 H2 O3 . (C2 H4 O)n H2 O)x  
CI PMS  
PCT Polyester, Polyester formed, Polyether, Polyolefin, Polyvinyl  
SR CA  
LC STN Files: CA, CAPLUS

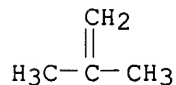
CM 1

CRN 25322-68-3  
CMF (C2 H4 O)n H2 O  
CCI PMS



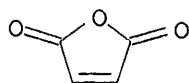
CM 2

CRN 115-11-7  
CMF C4 H8



CM 3

CRN 108-31-6  
CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 121:158416

L89 ANSWER 43 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 153853-58-8 REGISTRY

CN 2,5-Furandione, polymer with 4,5-dihydro-2-(1-methylethenyl)oxazole and 2-methyl-1-propene, ammonium salt (9CI). (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 4,5-dihydro-2-(1-methylethenyl)oxazole and 2,5-furandione, ammonium salt (9CI)

CN Oxazole, 4,5-dihydro-2-(1-methylethenyl)-, polymer with 2,5-furandione and 2-methyl-1-propene, ammonium salt (9CI)

MF (C6 H9 N O . C4 H8 . C4 H2 O3)x . x H3 N

PCT Polyolefin, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 153853-57-7

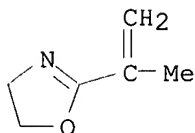
CMF (C6 H9 N O . C4 H8 . C4 H2 O3)x

CCI PMS

CM 2

CRN 10471-78-0

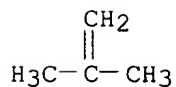
CMF C6 H9 N O



CM 3

CRN 115-11-7

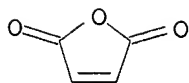
CMF C4 H8



CM 4

CRN 108-31-6

CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 120:193353

L89 ANSWER 44 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 152019-56-2 REGISTRY

CN 2-Propenoic acid, polymer with ethene and oxirane, block, graft (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Ethene, polymer with oxirane and 2-propenoic acid, block, graft (9CI)

CN Oxirane, polymer with ethene and 2-propenoic acid, block, graft (9CI)

MF (C3 H4 O2 . C2 H4 O . C2 H4)x

CI PMS

PCT Polyacrylic, Polyether, Polyether formed, Polyolefin

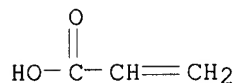
SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 79-10-7

CMF C3 H4 O2



CM 2

CRN 75-21-8

CMF C2 H4 O



CM 3

CRN 74-85-1

CMF C2 H4



2 REFERENCES IN FILE CA (1967 TO DATE)  
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 125:11684

REFERENCE 2: 120:31943

L89 ANSWER 45 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 151421-06-6 REGISTRY  
CN 2,5-Furandione, polymer with 1,6-hexanediamine and 2-methyl-1-propene,  
sodium salt (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1,6-Hexanediamine, polymer with 2,5-furandione and 2-methyl-1-propene,  
sodium salt (9CI)  
CN 1-Propene, 2-methyl-, polymer with 2,5-furandione and 1,6-hexanediamine,  
sodium salt (9CI)  
MF (C6 H16 N2 . C4 H8 . C4 H2 O3)x . x Na  
PCT Polyamide, Polyamide formed, Polyamine, Polyamine formed, Polyolefin,  
Polyvinyl  
SR CA  
LC STN Files: CA, CAPLUS

CM 1

CRN 151421-05-5  
CMF (C6 H16 N2 . C4 H8 . C4 H2 O3)x  
CCI PMS

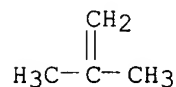
CM 2

CRN 124-09-4  
CMF C6 H16 N2

H<sub>2</sub>N- (CH<sub>2</sub>)<sub>6</sub>-NH<sub>2</sub>

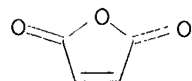
CM 3

CRN 115-11-7  
CMF C4 H8



CM 4

CRN 108-31-6  
CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 119:272033

L89 ANSWER 46 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 147545-70-8 REGISTRY  
CN 2-Propenoic acid, 2-methyl-, polymer with ethene, ester with  
.alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX

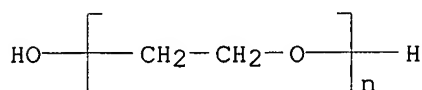
NAME)

## OTHER CA INDEX NAMES:

CN Ethene, polymer with 2-methyl-2-propenoic acid, ester with  
 .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) (9CI)  
 MF (C4 H6 O2 . C2 H4)x . x (C2 H4 O)n H2 O  
 PCT Polyacrylic, Polyether, Polyolefin  
 SR CA  
 LC STN Files: CA, CAPLUS

CM 1

CRN 25322-68-3  
 CMF (C2 H4 O)n H2 O  
 CCI PMS

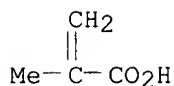


CM 2

CRN 25053-53-6  
 CMF (C4 H6 O2 . C2 H4)x  
 CCI PMS

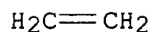
CM 3

CRN 79-41-4  
 CMF C4 H6 O2



CM 4

CRN 74-85-1  
 CMF C2 H4



1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 118:214102

L89 ANSWER 47 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 142708-63-2 REGISTRY

CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-,  
 2-methyl-2-propenoate, polymer with ethene (9CI) (CA INDEX NAME)

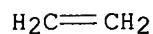
## OTHER CA INDEX NAMES:

CN Ethene, polymer with .alpha.-hydro-.omega.-hydroxy[poly(oxy-1,2-  
 ethanediyl)] 2-methyl-2-propenoate (9CI)  
 MF (C4 H6 O2 . x (C2 H4 O)n H2 O . C2 H4)x

CI PMS  
 PCT Polyacrylic, Polyether, Polyolefin  
 SR CA  
 LC STN Files: CA, CAPLUS

CM 1

CRN 74-85-1  
 CMF C2 H4

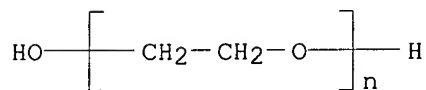


CM 2

CRN 9056-77-3  
 CMF C4 H6 O2 . x (C2 H4 O)n H2 O

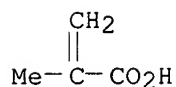
CM 3

CRN 25322-68-3  
 CMF (C2 H4 O)n H2 O  
 CCI PMS



CM 4

CRN 79-41-4  
 CMF C4 H6 O2



2 REFERENCES IN FILE CA (1967 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 117:71587

REFERENCE 2: 117:71586

L89 ANSWER 48 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 142277-89-2 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene, titanium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, titanium salt (9CI)

OTHER NAMES:

CN Isobutylene-maleic anhydride copolymer titanium salt

MF (C4 H8 . C4 H2 O3)x . x Ti

PCT Polyolefin, Polyvinyl

SR CA

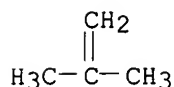
LC STN Files: CA, CAPLUS

CM 1

CRN 26426-80-2  
 CMF (C4 H8 . C4 H2 O3)x  
 CCI PMS

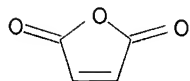
CM 2

CRN 115-11-7  
 CMF C4 H8



CM 3

CRN 108-31-6  
 CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 117:27472

L89 ANSWER 49 OF 155 REGISTRY COPYRIGHT 2002 ACS  
 RN 142277-88-1 REGISTRY  
 CN 2,5-Furandione, polymer with 2-methyl-1-propene, copper salt (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, copper salt (9CI)  
 OTHER NAMES:  
 CN Isobutylene-maleic anhydride copolymer copper salt  
 MF (C4 H8 . C4 H2 O3)x . x Cu  
 PCT Polyolefin, Polyvinyl  
 SR CA  
 LC STN Files: CA, CAPLUS

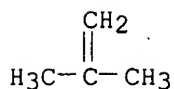
CM 1

CRN 26426-80-2  
 CMF (C4 H8 . C4 H2 O3)x  
 CCI PMS

CM 2

CRN 115-11-7  
 CMF C4 H8

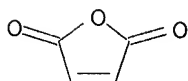




CM 3

CRN 108-31-6

CMF C4 H2 O3



2 REFERENCES IN FILE CA (1967 TO DATE)

2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 119:33222

REFERENCE 2: 117:27472

L89 ANSWER 50 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 141239-96-5 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene and .alpha.-(oxiranylmethyl)-.omega.-(oxiranylmethoxy)poly(oxy-1,2-ethanediyl), sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione and .alpha.-(oxiranylmethyl)-.omega.-(oxiranylmethoxy)poly(oxy-1,2-ethanediyl), sodium salt (9CI)

CN Poly(oxy-1,2-ethanediyl), .alpha.-(oxiranylmethyl)-.omega.-(oxiranylmethoxy)-, polymer with 2,5-furandione and 2-methyl-1-propene, sodium salt (9CI)

MF (C4 H8 . C4 H2 O3 . (C2 H4 O)n C6 H10 O3)x . x Na

PCT Epoxy resin, Polyester, Polyester formed, Polyether, Polyolefin, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 113095-69-5

CMF (C4 H8 . C4 H2 O3 . (C2 H4 O)n C6 H10 O3)x

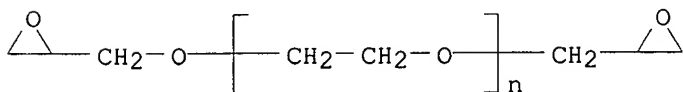
CCI PMS

CM 2

CRN 26403-72-5

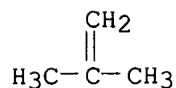
CMF (C2 H4 O)n C6 H10 O3

CCI PMS



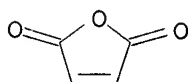
CM 3

CRN 115-11-7  
CMF C4 H8



CM 4

CRN 108-31-6  
CMF C4 H2 O3



2 REFERENCES IN FILE CA (1967 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 123:11767

REFERENCE 2: 116:216280

L89 ANSWER 51 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 141105-38-6 REGISTRY

CN 2,5-Furandione, polymer with ethenol and 2-methyl-1-propene, sodium salt  
(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with ethenol and 2,5-furandione, sodium salt  
(9CI)

CN Ethenol, polymer with 2,5-furandione and 2-methyl-1-propene, sodium salt  
(9CI)

MF (C4 H8 . C4 H2 O3 . C2 H4 O)x . x Na

PCT Polyolefin, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 52641-05-1

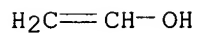
CMF (C4 H8 . C4 H2 O3 . C2 H4 O)x

CCI PMS

CM 2

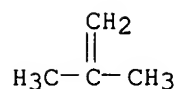
CRN 557-75-5

CMF C2 H4 O



CM 3

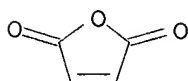
CRN 115-11-7  
CMF C4 H8



CM 4

CRN 108-31-6

CMF C4 H2 O3



2 REFERENCES IN FILE CA (1967 TO DATE)

2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:249099

REFERENCE 2: 116:216280

L89 ANSWER 52 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 140219-11-0 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene, zinc salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, zinc salt (9CI)

OTHER NAMES:

CN Isobutylene-maleic anhydride copolymer zinc salt

MF (C4 H8 . C4 H2 O3)x . x Zn

PCT Polyolefin, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 26426-80-2

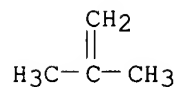
CMF (C4 H8 . C4 H2 O3)x

CCI PMS

CM 2

CRN 115-11-7

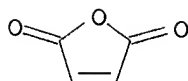
CMF C4 H8



CM 3

CRN 108-31-6

CMF C4 H2 O3



5 REFERENCES IN FILE CA (1967 TO DATE)  
5 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 119:33222  
REFERENCE 2: 118:65639  
REFERENCE 3: 117:136520  
REFERENCE 4: 117:27472  
REFERENCE 5: 116:179855

L89 ANSWER 53 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 137763-54-3 REGISTRY  
CN 2,5-Furandione, polymer with aziridine and 2-methyl-1-propene, sodium salt  
(9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1-Propene, 2-methyl-, polymer with aziridine and 2,5-furandione, sodium  
salt (9CI)  
CN Aziridine, polymer with 2,5-furandione and 2-methyl-1-propene, sodium salt  
(9CI)  
MF (C4 H8 . C4 H2 O3 . C2 H5 N)x . x Na  
PCT Polyamine, Polyamine formed, Polyolefin, Polyvinyl  
SR CA  
LC STN Files: CA, CAPLUS

CM 1

CRN 57649-62-4  
CMF (C4 H8 . C4 H2 O3 . C2 H5 N)x  
CCI PMS

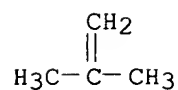
CM 2

CRN 151-56-4  
CMF C2 H5 N



CM 3

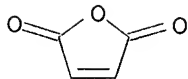
CRN 115-11-7  
CMF C4 H8



CM 4

CRN 108-31-6

CMF C4 H2 O3



4 REFERENCES IN FILE CA (1967 TO DATE)

4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 127:136848

REFERENCE 2: 119:119695

REFERENCE 3: 118:149541

REFERENCE 4: 115:281573

L89 ANSWER 54 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 137692-27-4 REGISTRY

CN 2-Butenedioic acid (2Z)-, ammonium salt, polymer with 2-methyl-1-propene  
(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with (Z)-ammonium 2-butenedioate (9CI)

CN 2-Butenedioic acid (Z)-, ammonium salt, polymer with 2-methyl-1-propene

FS STEREOSEARCH

MF (C4 H8 . C4 H4 O4 . x H3 N)x

CI PMS

PCT Polyolefin, Polyvinyl

SR CA

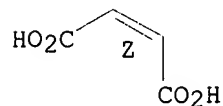
LC STN Files: CA, CAPLUS

CM 1

CRN 13716-99-9 (110-16-7)

CMF C4 H4 O4 . x H3 N

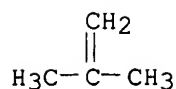
Double bond geometry as shown.

● x NH<sub>3</sub>

CM 2

CRN 115-11-7

CMF C4 H8



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 115:282276

L89 ANSWER 55 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 137414-12-1 REGISTRY

CN 2,5-Furandione, polymer with 1-amino-2-propanol and 2-methyl-1-propene, sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with (.+-.)-1-amino-2-propanol and 2,5-furandione, sodium salt

CN 1-Propene, 2-methyl-, polymer with 1-amino-2-propanol and 2,5-furandione, sodium salt (9CI)

CN 2,5-Furandione, polymer with (.+-.)-1-amino-2-propanol and 2-methyl-1-propene, sodium salt

CN 2-Propanol, 1-amino-, (.+-.)-, polymer with 2,5-furandione and 2-methyl-1-propene, sodium salt

CN 2-Propanol, 1-amino-, polymer with 2,5-furandione and 2-methyl-1-propene, sodium salt (9CI)

MF (C4 H8 . C4 H2 O3 . C3 H9 N O)x . x Na

PCT Polyolefin, Polyether, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 137414-11-0

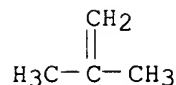
CMF (C4 H8 . C4 H2 O3 . C3 H9 N O)x

CCI PMS

CM 2

CRN 115-11-7

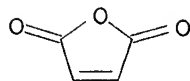
CMF C4 H8



CM 3

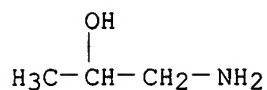
CRN 108-31-6

CMF C4 H2 O3



CM 4

CRN 78-96-6  
CMF C3 H9 N O



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 115:258180

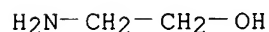
L89 ANSWER 56 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 137414-10-9 REGISTRY  
CN 2,5-Furandione, polymer with 2-aminoethanol and 2-methyl-1-propene, sodium salt (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1-Propene, 2-methyl-, polymer with 2-aminoethanol and 2,5-furandione, sodium salt (9CI)  
CN Ethanol, 2-amino-, polymer with 2,5-furandione and 2-methyl-1-propene, sodium salt (9CI)  
MF (C4 H8 . C4 H2 O3 . C2 H7 N O)x . x Na  
PCT Polyolefin, Polyether, Polyvinyl  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 137414-09-6  
CMF (C4 H8 . C4 H2 O3 . C2 H7 N O)x  
CCI PMS

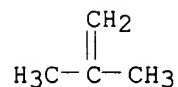
CM 2

CRN 141-43-5  
CMF C2 H7 N O



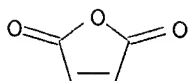
CM 3

CRN 115-11-7  
CMF C4 H8



CM 4

CRN 108-31-6  
CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 115:258180

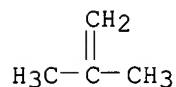
L89 ANSWER 57 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 137414-08-5 REGISTRY  
CN 2,5-Furandione, polymer with 2-amino-2-(hydroxymethyl)-1,3-propanediol and 2-methyl-1-propene, sodium salt (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, polymer with 2,5-furandione and 2-methyl-1-propene, sodium salt (9CI)  
CN 1-Propene, 2-methyl-, polymer with 2-amino-2-(hydroxymethyl)-1,3-propanediol and 2,5-furandione, sodium salt (9CI)  
MF (C4 H11 N O3 . C4 H8 . C4 H2 O3)x . x Na  
PCT Polyester, Polyester formed, Polyolefin, Polyvinyl  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 137414-07-4  
CMF (C4 H11 N O3 . C4 H8 . C4 H2 O3)x  
CCI PMS

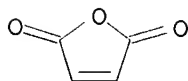
CM 2

CRN 115-11-7  
CMF C4 H8



CM 3

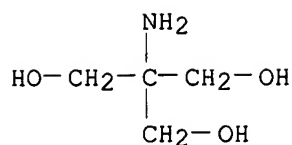
CRN 108-31-6  
CMF C4 H2 O3



CM 4

CRN 77-86-1  
CMF C4 H11 N O3





1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 115:258180

L89 ANSWER 58 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 136596-85-5 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene, sodium zinc salt (9CI)  
 (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, sodium zinc salt (9CI)

MF (C4 H8 . C4 H2 O3)x . x Na . x Zn

PCT Polyolefin, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 26426-80-2

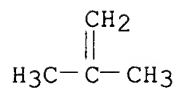
CMF (C4 H8 . C4 H2 O3)x

CCI PMS

CM 2

CRN 115-11-7

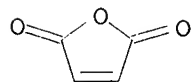
CMF C4 H8



CM 3

CRN 108-31-6

CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 115:188778

L89 ANSWER 59 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 136575-62-7 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene, nickel(2+) sodium salt  
 (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

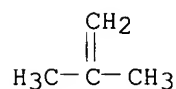
CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, nickel(2+) sodium salt  
(9CI)  
MF (C4 H8 . C4 H2 O3)x . x Na . x Ni  
PCT Polyolefin, Polyvinyl  
SR CA  
LC STN Files: CA, CAPLUS

CM 1

CRN 26426-80-2  
CMF (C4 H8 . C4 H2 O3)x  
CCI PMS

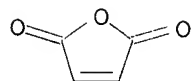
CM 2

CRN 115-11-7  
CMF C4 H8



CM 3

CRN 108-31-6  
CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 115:188778

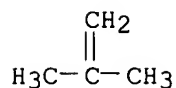
L89 ANSWER 60 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 136575-61-6 REGISTRY  
CN 2,5-Furandione, polymer with 2-methyl-1-propene, magnesium sodium salt  
(9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, magnesium sodium salt  
(9CI)  
MF (C4 H8 . C4 H2 O3)x . x Mg . x Na  
PCT Polyolefin, Polyvinyl  
SR CA  
LC STN Files: CA, CAPLUS

CM 1

CRN 26426-80-2  
CMF (C4 H8 . C4 H2 O3)x  
CCI PMS

CM 2

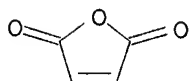
CRN 115-11-7  
CMF C4 H8



CM 3

CRN 108-31-6

CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 115:188778

L89 ANSWER 61 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 136575-60-5 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene, iron(2+) sodium salt  
(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, iron(2+) sodium salt  
(9CI)

MF (C4 H8 . C4 H2 O3)x . x Fe . x Na

PCT Polyolefin, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 26426-80-2

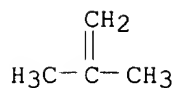
CMF (C4 H8 . C4 H2 O3)x

CCI PMS

CM 2

CRN 115-11-7

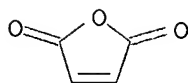
CMF C4 H8



CM 3

CRN 108-31-6

CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 115:188778

L89 ANSWER 62 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 136575-59-2 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene, aluminum sodium salt  
(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, aluminum sodium salt  
(9CI)

MF (C4 H8 . C4 H2 O3)x . x Al . x Na

PCT Polyolefin, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 26426-80-2

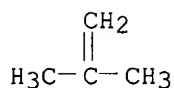
CMF (C4 H8 . C4 H2 O3)x

CCI PMS

CM 2

CRN 115-11-7

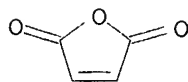
CMF C4 H8



CM 3

CRN 108-31-6

CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 115:188778

L89 ANSWER 63 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 136575-58-1 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene, aluminum salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, aluminum salt (9CI)

## OTHER NAMES:

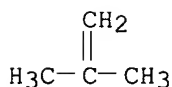
CN Isobutene-maleic anhydride copolymer aluminum salt  
CN Isobutylene-maleic anhydride copolymer aluminum salt  
MF (C4 H8 . C4 H2 O3)x . x Al  
PCT Polyolefin, Polyvinyl  
SR CA  
LC STN Files: CA, CAPLUS

CM 1

CRN 26426-80-2  
CMF (C4 H8 . C4 H2 O3)x  
CCI PMS

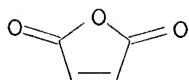
CM 2

CRN 115-11-7  
CMF C4 H8



CM 3

CRN 108-31-6  
CMF C4 H2 O3



4 REFERENCES IN FILE CA (1967 TO DATE)  
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 137:110635

REFERENCE 2: 137:34602

REFERENCE 3: 117:27472

REFERENCE 4: 115:188778

L89 ANSWER 64 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 135639-46-2 REGISTRY

CN 2-Butenedioic acid (2Z)-, polymer with 2-methyl-1-propene, alternating  
(9CI) (CA INDEX NAME)

## OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with (2Z)-2-butenedioic acid, alternating  
(9CI)

CN 1-Propene, 2-methyl-, polymer with (Z)-2-butenedioic acid, alternating

CN 2-Butenedioic acid (Z)-, polymer with 2-methyl-1-propene, alternating

FS STEREOSEARCH

MF (C4 H8 . C4 H4 O4)x

CI PMS

PCT Polyolefin, Polyvinyl

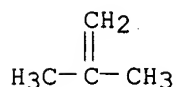
SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 115-11-7

CMF C4 H8

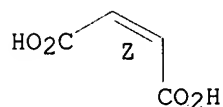


CM 2

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



2 REFERENCES IN FILE CA (1967 TO DATE)

2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 115:233396

REFERENCE 2: 115:208958

L89 ANSWER 65 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 134437-81-3 REGISTRY

CN 1H-Pyrrole-2,5-dione, 1-dodecyl-, polymer with 2,5-furandione and 2-methyl-1-propene, sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 1-dodecyl-1H-pyrrole-2,5-dione and 2,5-furandione, sodium salt (9CI)

CN 2,5-Furandione, polymer with 1-dodecyl-1H-pyrrole-2,5-dione and 2-methyl-1-propene, sodium salt (9CI)

MF (C16 H27 N O2 . C4 H8 . C4 H2 O3)x . x Na

PCT Polyolefin, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 134437-80-2

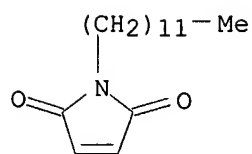
CMF (C16 H27 N O2 . C4 H8 . C4 H2 O3)x

CCI PMS

CM 2

CRN 17616-03-4

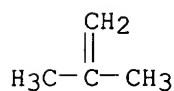
CMF C16 H27 N O2



CM 3

CRN 115-11-7

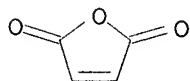
CMF C4 H8



CM 4

CRN 108-31-6

CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 115:11311

L89 ANSWER 66 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 127864-52-2 REGISTRY

CN 2-Butenedioic acid, monoammonium salt, polymer with 2-methyl-1-propene  
(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with ammonium hydrogen 2-butenedioate (9CI)

MF (C4 H8 . C4 H4 O4 . H3 N)x

CI PMS

PCT Polyolefin, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS

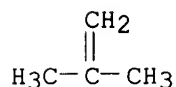
CM 1

CRN 1509-68-8 (6915-18-0)

CMF C4 H4 O4 . H3 N



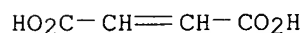
CM 2

CRN 115-11-7  
CMF C4 H81 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 113:31788

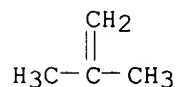
L89 ANSWER 67 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 127864-51-1 REGISTRY  
CN 2-Butenedioic acid, monopotassium salt, polymer with 2-methyl-1-propene  
(9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1-Propene, 2-methyl-, polymer with potassium hydrogen 2-butenedioate (9CI)  
MF (C4 H8 . C4 H4 O4 . K)x  
CI PMS  
PCT Polyolefin, Polyvinyl  
SR CA  
LC STN Files: CA, CAPLUS

CM 1

CRN 116549-86-1 (6915-18-0)  
CMF C4 H4 O4 . K

● K

CM 2

CRN 115-11-7  
CMF C4 H81 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 113:31788

L89 ANSWER 68 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 127864-27-1 REGISTRY  
CN 2-Butenedioic acid, monolithium salt, polymer with 2-methyl-1-propene  
(9CI) (CA INDEX NAME)

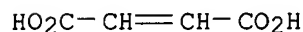


## OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with lithium hydrogen 2-butenedioate (9CI)  
 MF (C4 H8 . C4 H4 O4 . Li)x  
 CI PMS  
 PCT Polyolefin, Polyvinyl  
 SR CA  
 LC STN Files: CA, CAPLUS

CM 1

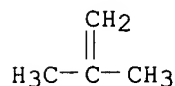
CRN 127864-26-0 (6915-18-0)  
 CMF C4 H4 O4 . Li



● Li

CM 2

CRN 115-11-7  
 CMF C4 H8



1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 113:31788

L89 ANSWER 69 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 127176-79-8 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene, sodium salt, compd. with 1-dodecanamine (9CI) (CA INDEX NAME)

## OTHER CA INDEX NAMES:

CN 1-Dodecanamine, sodium salt, compd. with 2,5-furandione polymer with 2-methyl-1-propene (9CI)  
 CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, sodium salt, compd. with 1-dodecanamine (9CI)

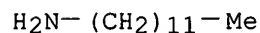
MF C12 H27 N . x (C4 H8 . C4 H2 O3)x . x Na

PCT Polyolefin, Polyvinyl

SR CA

CM 1

CRN 124-22-1  
 CMF C12 H27 N

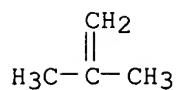


CM 2

CRN 26426-80-2  
 CMF (C4 H8 . C4 H2 O3)x  
 CCI PMS

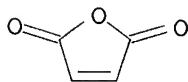
CM 3

CRN 115-11-7  
 CMF C4 H8



CM 4

CRN 108-31-6  
 CMF C4 H2 O3



L89 ANSWER 70 OF 155 REGISTRY COPYRIGHT 2002 ACS  
 RN 127176-76-5 REGISTRY  
 CN 2,5-Furandione, polymer with 2-methyl-1-propene, sodium salt, compd. with  
 N,N-dimethyl-1-dodecanamine (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 1-Dodecanamine, N,N-dimethyl-, sodium salt, compd. with 2,5-furandione  
 polymer with 2-methyl-1-propene (9CI)  
 CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, sodium salt, compd.  
 with N,N-dimethyl-1-dodecanamine (9CI)  
 MF C14 H31 N . x (C4 H8 . C4 H2 O3)x . x Na  
 PCT Polyolefin, Polyvinyl  
 SR CA

CM 1

CRN 112-18-5  
 CMF C14 H31 N

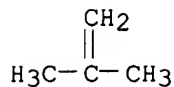
Me<sub>2</sub>N-(CH<sub>2</sub>)<sub>11</sub>-Me

CM 2

CRN 26426-80-2  
 CMF (C4 H8 . C4 H2 O3)x  
 CCI PMS

CM 3

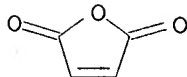
CRN 115-11-7  
 CMF C4 H8



CM 4

CRN 108-31-6

CMF C4 H2 O3



L89 ANSWER 71 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 127176-75-4 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene, sodium salt, compd. with N-octadecyl-1-octadecanamine (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Octadecanamine, N-octadecyl-, sodium salt, compd. with 2,5-furandione polymer with 2-methyl-1-propene (9CI)

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, sodium salt, compd. with N-octadecyl-1-octadecanamine (9CI)

MF C36 H75 N . x (C4 H8 . C4 H2 O3)x . x Na

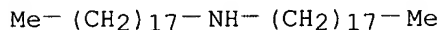
PCT Polyolefin, Polyvinyl

SR CA

CM 1

CRN 112-99-2

CMF C36 H75 N



CM 2

CRN 26426-80-2

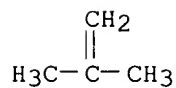
CMF (C4 H8 . C4 H2 O3)x

CCI PMS

CM 3

CRN 115-11-7

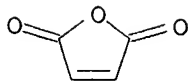
CMF C4 H8



CM 4

CRN 108-31-6

CMF C4 H2 O3



L89 ANSWER 72 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 127176-74-3 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene, sodium salt, compd. with 1-octadecanamine (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Octadecanamine, sodium salt, compd. with 2,5-furandione polymer with 2-methyl-1-propene (9CI)

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, sodium salt, compd. with 1-octadecanamine (9CI)

MF C18 H39 N . x (C4 H8 . C4 H2 O3)x . x Na

PCT Polyolefin, Polyvinyl

SR CA

CM 1

CRN 124-30-1

CMF C18 H39 N

H<sub>2</sub>N-(CH<sub>2</sub>)<sub>17</sub>-Me

CM 2

CRN 26426-80-2

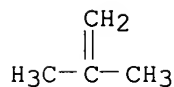
CMF (C4 H8 . C4 H2 O3)x

CCI PMS

CM 3

CRN 115-11-7

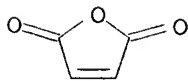
CMF C4 H8



CM 4

CRN 108-31-6

CMF C4 H2 O3



L89 ANSWER 73 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 127176-73-2 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene, sodium salt, compd. with N,N-dimethyl-1-octadecanamine (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Octadecanamine, N,N-dimethyl-, sodium salt, compd. with 2,5-furandione polymer with 2-methyl-1-propene (9CI)

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, sodium salt, compd. with N,N-dimethyl-1-octadecanamine (9CI)

MF C20 H43 N . x (C4 H8 . C4 H2 O3)x . x Na

PCT Polyolefin, Polyvinyl

SR CA

CM 1

CRN 124-28-7

CMF C20 H43 N

Me<sub>2</sub>N-(CH<sub>2</sub>)<sub>17</sub>-Me

CM 2

CRN 26426-80-2

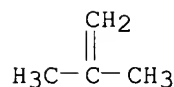
CMF (C4 H8 . C4 H2 O3)x

CCI PMS

CM 3

CRN 115-11-7

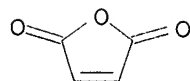
CMF C4 H8



CM 4

CRN 108-31-6

CMF C4 H2 O3



L89 ANSWER 74 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 127176-72-1 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene, sodium salt, compd. with N-methyl-N-octadecyl-1-octadecanamine (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Octadecanamine, N-methyl-N-octadecyl-, sodium salt, compd. with 2,5-furandione polymer with 2-methyl-1-propene (9CI)

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, sodium salt, compd. with N-methyl-N-octadecyl-1-octadecanamine (9CI)

MF C37 H77 N . x (C4 H8 . C4 H2 O3)x . x Na

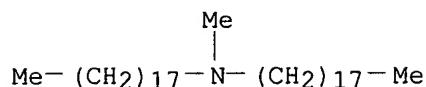
PCT Polyolefin, Polyvinyl

SR CA

CM 1

CRN 4088-22-6

CMF C37 H77 N



CM 2

CRN 26426-80-2

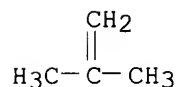
CMF (C4 H8 . C4 H2 O3)x

CCI PMS

CM 3

CRN 115-11-7

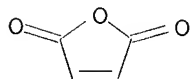
CMF C4 H8



CM 4

CRN 108-31-6

CMF C4 H2 O3



L89 ANSWER 75 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 126692-20-4 REGISTRY

CN Isocyanic acid, polymethylenepolyphenylene ester, polymer with 2,5-furandione and 2-methyl-1-propene, sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione and polymethylenepolyphenylene isocyanate, sodium salt (9CI)

CN 2,5-Furandione, polymer with 2-methyl-1-propene and polymethylenepolyphenylene isocyanate, sodium salt (9CI)

MF (C4 H8 . C4 H2 O3 . Unspecified)x . x Na

PCT Manual component, Manual registration, Polycarbodiimide, Polycarbodiimide formed, Polyisocyanurate, Polyisocyanurate formed, Polyolefin, Polyether, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 126692-19-1

CMF (C4 H8 . C4 H2 O3 . Unspecified)x

CCI PMS

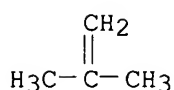
CM 2

CRN 9016-87-9  
 CMF Unspecified  
 CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

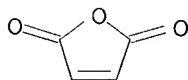
CM 3

CRN 115-11-7  
 CMF C4 H8



CM 4

CRN 108-31-6  
 CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 112:180987

L89 ANSWER 76 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 126338-11-2 REGISTRY

CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with 2,5-furandione  
 and 2-methyl-1-propene, sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with dodecyl 2-methyl-2-propenoate and  
 2,5-furandione, sodium salt (9CI)

CN 2,5-Furandione, polymer with dodecyl 2-methyl-2-propenoate and  
 2-methyl-1-propene, sodium salt (9CI)

OTHER NAMES:

CN n-Dodecyl methacrylate-isobutylene-maleic anhydride copolymer sodium salt  
 MF (C16 H30 O2 . C4 H8 . C4 H2 O3)x . x Na

PCT Polyacrylic, Polyolefin, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS

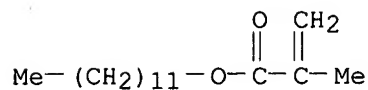
CM 1

CRN 103849-62-3  
 CMF (C16 H30 O2 . C4 H8 . C4 H2 O3)x  
 CCI PMS

CM 2

CRN 142-90-5

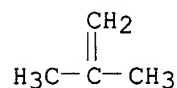
CMF C16 H30 O2



CM 3

CRN 115-11-7

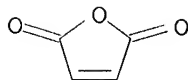
CMF C4 H8



CM 4

CRN 108-31-6

CMF C4 H2 O3



2 REFERENCES IN FILE CA (1967 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 115:184619

REFERENCE 2: 112:199360

L89 ANSWER 77 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 126338-10-1 REGISTRY

CN 2-Propenoic acid, 2-methyl-, docosyl ester, polymer with 2,5-furandione  
 and 2-methyl-1-propene, sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with docosyl 2-methyl-2-propenoate and  
 2,5-furandione, sodium salt (9CI)

CN 2,5-Furandione, polymer with docosyl 2-methyl-2-propenoate and  
 2-methyl-1-propene, sodium salt (9CI)

OTHER NAMES:

CN n-Docosyl methacrylate-isobutylene-maleic anhydride copolymer sodium salt

MF (C26 H50 O2 . C4 H8 . C4 H2 O3)x . x Na

PCT Polyacrylic, Polyolefin, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 103875-04-3

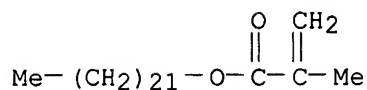
CMF (C26 H50 O2 . C4 H8 . C4 H2 O3)x

CCI PMS

CM 2

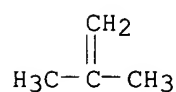


CRN 16669-27-5  
CMF C26 H50 O2



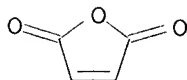
CM 3

CRN 115-11-7  
CMF C4 H8



CM 4

CRN 108-31-6  
CMF C4 H2 O3



2 REFERENCES IN FILE CA (1967 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 115:184619

REFERENCE 2: 112:199360

L89 ANSWER 78 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 124912-72-7 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene, alternating, sodium salt  
(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, alternating, sodium  
salt (9CI)

MF (C4 H8 . C4 H2 O3)x . x Na

PCT Polyolefin, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 110171-93-2

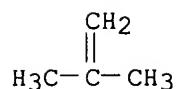
CMF (C4 H8 . C4 H2 O3)x

CCI PMS

CM 2

CRN 115-11-7

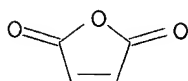
CMF C4 H8



CM 3

CRN 108-31-6

CMF C4 H2 O3



3 REFERENCES IN FILE CA (1967 TO DATE)

3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:235811

REFERENCE 2: 124:88367

REFERENCE 3: 112:58896

L89 ANSWER 79 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 124036-73-3 REGISTRY

CN 2,5-Furandione, polymer with 2,2'-[1,2-ethanediylbis(oxymethylene)]bis[oxirane] and 2-methyl-1-propene, sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,2'-[1,2-ethanediylbis(oxymethylene)]bis[oxirane] and 2,5-furandione, sodium salt (9CI)

CN Oxirane, 2,2'-[1,2-ethanediylbis(oxymethylene)]bis-, polymer with 2,5-furandione and 2-methyl-1-propene, sodium salt (9CI)

MF (C8 H14 O4 . C4 H8 . C4 H2 O3)x . x Na

PCT Epoxy resin, Polyester, Polyester formed, Polyether, Polyolefin, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 118825-74-4

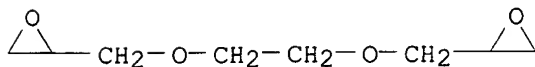
CMF (C8 H14 O4 . C4 H8 . C4 H2 O3)x

CCI PMS

CM 2

CRN 2224-15-9

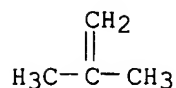
CMF C8 H14 O4



CM 3

CRN 115-11-7

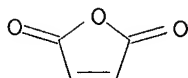
CMF C4 H8



CM 4

CRN 108-31-6

CMF C4 H2 O3



2 REFERENCES IN FILE CA (1967 TO DATE)

2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 115:281573

REFERENCE 2: 112:78923

L89 ANSWER 80 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 123714-12-5 REGISTRY

CN 2-Butenedioic acid (2Z)-, polymer with dodecyl 2-propenoate and  
2-methyl-1-propene, sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with (2Z)-2-butenedioic acid and dodecyl  
2-propenoate, sodium salt (9CI)CN 1-Propene, 2-methyl-, polymer with (Z)-2-butenedioic acid and dodecyl  
2-propenoate, sodium saltCN 2-Butenedioic acid (Z)-, polymer with dodecyl 2-propenoate and  
2-methyl-1-propene, sodium saltCN 2-Propenoic acid, dodecyl ester, polymer with (2Z)-2-butenedioic acid and  
2-methyl-1-propene, sodium salt (9CI)CN 2-Propenoic acid, dodecyl ester, polymer with (Z)-2-butenedioic acid and  
2-methyl-1-propene, sodium salt

OTHER NAMES:

CN Dodecyl acrylate-isobutylene-maleic acid copolymer sodium salt

FS STEREOSEARCH

MF (C15 H28 O2 . C4 H8 . C4 H4 O4)x . x Na

PCT Polyacrylic, Polyolefin, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 123714-11-4

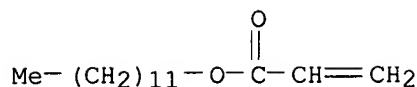
CMF (C15 H28 O2 . C4 H8 . C4 H4 O4)x

CCI PMS

CM 2

CRN 2156-97-0

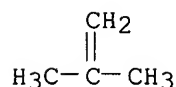
CMF C15 H28 O2



CM 3

CRN 115-11-7

CMF C4 H8

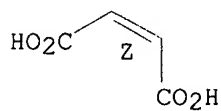


CM 4

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



2 REFERENCES IN FILE CA (1967 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 111:235168

REFERENCE 2: 111:216030

L89 ANSWER 81 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 123714-10-3 REGISTRY

CN 2-Butenedioic acid (2Z)-, polymer with 3-methyl-1-butene and 2-methyl-1-propene, sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Butene, 3-methyl-, polymer with (2Z)-2-butenedioic acid and 2-methyl-1-propene, sodium salt (9CI)

CN 1-Butene, 3-methyl-, polymer with (Z)-2-butenedioic acid and 2-methyl-1-propene, sodium salt

CN 1-Propene, 2-methyl-, polymer with (2Z)-2-butenedioic acid and 3-methyl-1-butene, sodium salt (9CI)

CN 1-Propene, 2-methyl-, polymer with (Z)-2-butenedioic acid and 3-methyl-1-butene, sodium salt

CN 2-Butenedioic acid (Z)-, polymer with 3-methyl-1-butene and 2-methyl-1-propene, sodium salt

OTHER NAMES:

CN .alpha.-Isoamylene-isobutylene-maleic acid copolymer sodium salt

FS STEREOSEARCH

MF (C5 H10 . C4 H8 . C4 H4 O4)x . x Na

PCT Polyolefin, Polyvinyl

SR CA

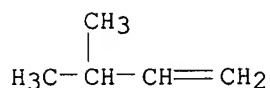
LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 123714-09-0  
CMF (C5 H10 . C4 H8 . C4 H4 O4)x  
CCI PMS

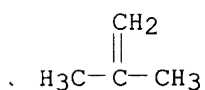
CM 2

CRN 563-45-1  
CMF C5 H10



CM 3

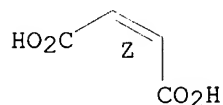
CRN 115-11-7  
CMF C4 H8



CM 4

CRN 110-16-7  
CMF C4 H4 O4

Double bond geometry as shown.



2 REFERENCES IN FILE CA (1967 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 111:235168

REFERENCE 2: 111:216030

L89 ANSWER 82 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 122197-21-1 REGISTRY

CN 2-Butenedioic acid, polymer with 2-methyl-1-propene (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2-butenedioic acid (9CI)

MF (C4 H8 . C4 H4 O4)x

CI PMS

PCT Polyolefin, Polyvinyl

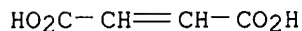
SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 6915-18-0

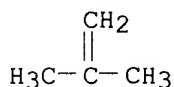
CMF C4 H4 O4



CM 2

CRN 115-11-7

CMF C4 H8



2 REFERENCES IN FILE CA (1967 TO DATE)

2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 116:204363

REFERENCE 2: 111:67800

L89 ANSWER 83 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 121510-62-1 REGISTRY

CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with 2,5-furandione and 2-methyl-1-propene, ammonium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with dodecyl 2-methyl-2-propenoate and 2,5-furandione, ammonium salt (9CI)

CN 2,5-Furandione, polymer with dodecyl 2-methyl-2-propenoate and 2-methyl-1-propene, ammonium salt (9CI)

MF (C16 H30 O2 . C4 H8 . C4 H2 O3)x . x H3 N

PCT Polyacrylic, Polyolefin, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 103849-62-3

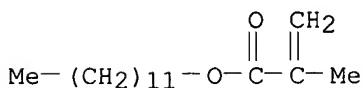
CMF (C16 H30 O2 . C4 H8 . C4 H2 O3)x

CCI PMS

CM 2

CRN 142-90-5

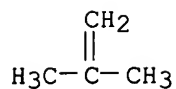
CMF C16 H30 O2



CM 3

CRN 115-11-7

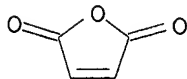
CMF C4 H8



CM 4

CRN 108-31-6

CMF C4 H2 O3



2 REFERENCES IN FILE CA (1967 TO DATE)

2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 115:184619

REFERENCE 2: 111:41918

L89 ANSWER 84 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 121367-79-1 REGISTRY

CN 2-Butenedioic acid, monosodium salt, polymer with 2-methyl-1-propene (9CI)  
(CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with sodium hydrogen 2-butenedioate (9CI)

MF (C4 H8 . C4 H4 O4 . Na) x

CI PMS

PCT Polyolefin, Polyvinyl

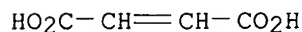
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 44670-32-8 (6915-18-0)

CMF C4 H4 O4 . Na

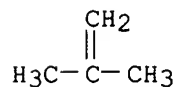


● Na

CM 2

CRN 115-11-7

CMF C4 H8



3 REFERENCES IN FILE CA (1967 TO DATE)

3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 119:170409

REFERENCE 2: 113:31788

REFERENCE 3: 111:31242

L89 ANSWER 85 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 117189-24-9 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene, lithium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, lithium salt (9CI)

MF (C4 H8 . C4 H2 O3)x . x Li

PCT Polyolefin, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 26426-80-2

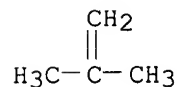
CMF (C4 H8 . C4 H2 O3)x

CCI PMS

CM 2

CRN 115-11-7

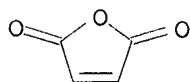
CMF C4 H8



CM 3

CRN 108-31-6

CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 109:195111

L89 ANSWER 86 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 115634-85-0 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene and 2,2'-oxybis[ethanol], sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione and 2,2'-oxybis[ethanol], sodium salt (9CI)

CN Ethanol, 2,2'-oxybis-, polymer with 2,5-furandione and 2-methyl-1-propene, sodium salt (9CI)

MF (C4 H10 O3 . C4 H8 . C4 H2 O3)x . x Na

PCT Polyester, Polyester formed, Polyether, Polyolefin, Polyvinyl



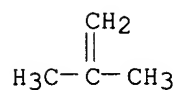
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 115634-84-9  
CMF (C4 H10 O3 . C4 H8 . C4 H2 O3)x  
CCI PMS

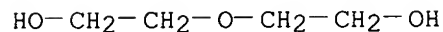
CM 2

CRN 115-11-7  
CMF C4 H8



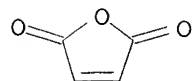
CM 3

CRN 111-46-6  
CMF C4 H10 O3



CM 4

CRN 108-31-6  
CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 109:56499

L89 ANSWER 87 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 115634-83-8 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene and 1,2,3-propanetriol,  
sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,2,3-Propanetriol, polymer with 2,5-furandione and 2-methyl-1-propene,  
sodium salt (9CI)

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione and 1,2,3-propanetriol,  
sodium salt (9CI)

OTHER NAMES:

CN Isobutylene-glycerol-maleic anhydride copolymer sodium salt

MF (C4 H8 . C4 H2 O3 . C3 H8 O3)x . x Na

PCT Polyester, Polyester formed, Polyolefin, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 115634-82-7

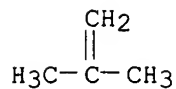
CMF (C4 H8 . C4 H2 O3 . C3 H8 O3)x

CCI PMS

CM 2

CRN 115-11-7

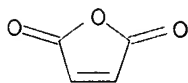
CMF C4 H8



CM 3

CRN 108-31-6

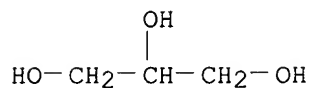
CMF C4 H2 O3



CM 4

CRN 56-81-5

CMF C3 H8 O3



2 REFERENCES IN FILE CA (1967 TO DATE)

2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 128:35939

REFERENCE 2: 109:56499

L89 ANSWER 88 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 115634-82-7 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene and 1,2,3-propanetriol  
(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,2,3-Propanetriol, polymer with 2,5-furandione and 2-methyl-1-propene  
(9CI)CN 1-Propene, 2-methyl-, polymer with 2,5-furandione and 1,2,3-propanetriol  
(9CI)

MF (C4 H8 . C4 H2 O3 . C3 H8 O3)x

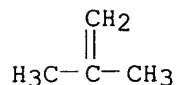
CI PMS, COM

PCT Polyester, Polyester formed, Polyolefin, Polyvinyl

SR CA

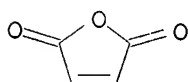
CM 1

CRN 115-11-7  
CMF C4 H8



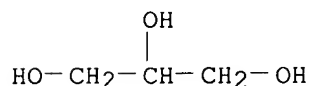
CM 2

CRN 108-31-6  
CMF C4 H2 O3



CM 3

CRN 56-81-5  
CMF C3 H8 O3



L89 ANSWER 89 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 115634-81-6 REGISTRY

CN 2,5-Furandione, polymer with 1,4-butanediol and 2-methyl-1-propene, sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,4-Butanediol, polymer with 2,5-furandione and 2-methyl-1-propene, sodium salt (9CI)

CN 1-Propene, 2-methyl-, polymer with 1,4-butanediol and 2,5-furandione, sodium salt (9CI)

MF (C4 H10 O2 . C4 H8 . C4 H2 O3)x . x Na

PCT Polyester, Polyester formed, Polyolefin, Polyvinyl

SR CA

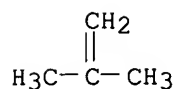
LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 115634-80-5  
CMF (C4 H10 O2 . C4 H8 . C4 H2 O3)x  
CCI PMS

CM 2

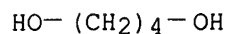
CRN 115-11-7  
CMF C4 H8



CM 3

CRN 110-63-4

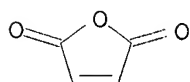
CMF C4 H10 O2



CM 4

CRN 108-31-6

CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 109:56499

L89 ANSWER 90 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 115634-79-2 REGISTRY

CN 2,5-Furandione, polymer with 1,2-ethanediol and 2-methyl-1-propene, sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,2-Ethanediol, polymer with 2,5-furandione and 2-methyl-1-propene, sodium salt (9CI)

CN 1-Propene, 2-methyl-, polymer with 1,2-ethanediol and 2,5-furandione, sodium salt (9CI)

MF (C4 H8 . C4 H2 O3 . C2 H6 O2)x . x Na

PCT Polyester, Polyester formed, Polyolefin, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 115634-78-1

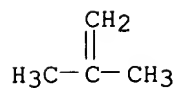
CMF (C4 H8 . C4 H2 O3 . C2 H6 O2)x

CCI PMS

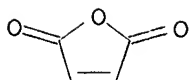
CM 2

CRN 115-11-7

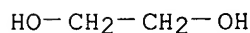
CMF C4 H8



CM 3

CRN 108-31-6  
CMF C4 H2 O3

CM 4

CRN 107-21-1  
CMF C2 H6 O21 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 109:56499

L89 ANSWER 91 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 115634-77-0 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene and 1,2-propanediol,  
sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,2-Propanediol, polymer with 2,5-furandione and 2-methyl-1-propene,  
sodium salt (9CI)CN 1-Propene, 2-methyl-, polymer with 2,5-furandione and 1,2-propanediol,  
sodium salt (9CI)

MF (C4 H8 . C4 H2 O3 . C3 H8 O2)x . x Na

PCT Polyester, Polyester formed, Polyolefin, Polyvinyl

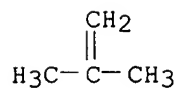
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 115634-76-9  
CMF (C4 H8 . C4 H2 O3 . C3 H8 O2)x  
CCI PMS

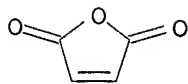
CM 2

CRN 115-11-7  
CMF C4 H8

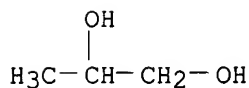
CM 3

CRN 108-31-6

CMF C4 H2 O3



CM 4

 CRN 57-55-6  
 CMF C3 H8 O2

 1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 109:56499

L89 ANSWER 92 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 114783-38-9 REGISTRY

 CN 2-Butenedioic acid (2Z)-, polymer with 2-methyl-1-propene and methyl  
 2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

 CN 1-Propene, 2-methyl-, polymer with (2Z)-2-butenedioic acid and methyl  
 2-propenoate, ammonium salt (9CI)

 CN 1-Propene, 2-methyl-, polymer with (Z)-2-butenedioic acid and methyl  
 2-propenoate, ammonium salt

 CN 2-Butenedioic acid (Z)-, polymer with 2-methyl-1-propene and methyl  
 2-propenoate, ammonium salt

 CN 2-Propenoic acid, methyl ester, polymer with (2Z)-2-butenedioic acid and  
 2-methyl-1-propene, ammonium salt (9CI)

 CN 2-Propenoic acid, methyl ester, polymer with (Z)-2-butenedioic acid and  
 2-methyl-1-propene, ammonium salt

FS STEREOSEARCH

MF (C4 H8 . C4 H6 O2 . C4 H4 O4)x . x H3 N

PCT Polyacrylic, Polyolefin, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 112340-07-5

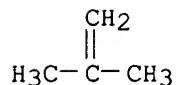
CMF (C4 H8 . C4 H6 O2 . C4 H4 O4)x

CCI .PMS

CM 2

CRN 115-11-7

CMF C4 H8

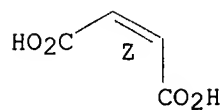


CM 3

CRN 110-16-7

CMF C4 H4 O4

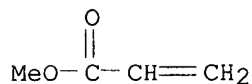
Double bond geometry as shown.



CM 4

CRN 96-33-3

CMF C4 H6 O2



1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 108:229742

L89 ANSWER 93 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 113736-49-5 REGISTRY

CN 2,5-Furandione, polymer with 1,3-dioxan-2-one and 2-methyl-1-propene, sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,3-Dioxan-2-one, polymer with 2,5-furandione and 2-methyl-1-propene, sodium salt (9CI)

CN 1-Propene, 2-methyl-, polymer with 1,3-dioxan-2-one and 2,5-furandione, sodium salt (9CI)

MF (C4 H8 . C4 H6 O3 . C4 H2 O3)x . x Na

PCT Polycarbonate, Polycarbonate formed, Polyolefin, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 113736-48-4

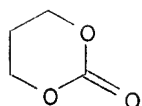
CMF (C4 H8 . C4 H6 O3 . C4 H2 O3)x

CCI PMS

CM 2

CRN 2453-03-4

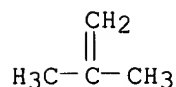
CMF C4 H6 O3



CM 3

CRN 115-11-7

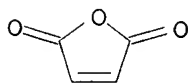
CMF C4 H8



CM 4

CRN 108-31-6

CMF C4 H2 O3



2 REFERENCES IN FILE CA (1967 TO DATE)

2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 111:45364

REFERENCE 2: 108:156498

L89 ANSWER 94 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 113095-14-0 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene, calcium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, calcium salt (9CI)

OTHER NAMES:

CN Isobutene-maleic anhydride copolymer calcium salt

CN Isobutylene-maleic anhydride copolymer calcium salt

MF (C4 H8 . C4 H2 O3)x . x Ca

PCT Polyolefin, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 26426-80-2

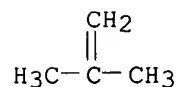
CMF (C4 H8 . C4 H2 O3)x

CCI PMS

CM 2

CRN 115-11-7

CMF C4 H8

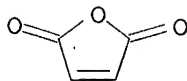




CM 3

CRN 108-31-6

CMF C4 H2 O3



3 REFERENCES IN FILE CA (1967 TO DATE)

3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 115:188778

REFERENCE 2: 108:117838

REFERENCE 3: 108:113802

L89 ANSWER 95 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 112902-87-1 REGISTRY

CN 2-Propenoic acid, methyl ester, polymer with 2,5-furandione and  
2-methyl-1-propene, ammonium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione and methyl 2-propenoate,  
ammonium salt (9CI)CN 2,5-Furandione, polymer with 2-methyl-1-propene and methyl 2-propenoate,  
ammonium salt (9CI)

OTHER NAMES:

CN Isobutylene-maleic anhydride-methyl acrylate copolymer ammonium salt

MF (C4 H8 . C4 H6 O2 . C4 H2 O3)x . x H3 N

PCT Polyacrylic, Polyolefin, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 53367-76-3

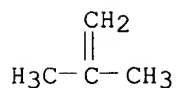
CMF (C4 H8 . C4 H6 O2 . C4 H2 O3)x

CCI PMS

CM 2

CRN 115-11-7

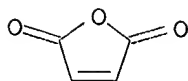
CMF C4 H8



CM 3

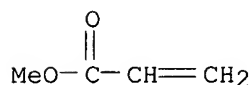
CRN 108-31-6

CMF C4 H2 O3



CM 4

CRN 96-33-3  
CMF C4 H6 O2



3 REFERENCES IN FILE CA (1967 TO DATE)  
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 108:169335

REFERENCE 2: 108:152307

REFERENCE 3: 108:77367

L89 ANSWER 96 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 112340-08-6 REGISTRY

CN 2-Butenedioic acid (2Z)-, polymer with 2-methyl-1-propene and methyl  
2-propenoate, sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with (2Z)-2-butenedioic acid and methyl  
2-propenoate, sodium salt (9CI)

CN 1-Propene, 2-methyl-, polymer with (Z)-2-butenedioic acid and methyl  
2-propenoate, sodium salt

CN 2-Butenedioic acid (Z)-, polymer with 2-methyl-1-propene and methyl  
2-propenoate, sodium salt

CN 2-Propenoic acid, methyl ester, polymer with (2Z)-2-butenedioic acid and  
2-methyl-1-propene, sodium salt (9CI)

CN 2-Propenoic acid, methyl ester, polymer with (Z)-2-butenedioic acid and  
2-methyl-1-propene, sodium salt

OTHER NAMES:

CN Isobutylene-methacrylic acid-methyl acrylate copolymer sodium salt

FS STEREOSEARCH

MF (C4 H8 . C4 H6 O2 . C4 H4 O4)x . x Na

PCT Polyacrylic, Polyolefin, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 112340-07-5

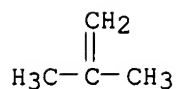
CMF (C4 H8 . C4 H6 O2 . C4 H4 O4)x

CCI PMS

CM 2

CRN 115-11-7

CMF C4 H8

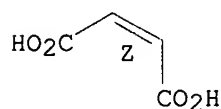


CM 3

CRN 110-16-7

CMF C4 H4 O4

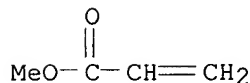
Double bond geometry as shown.



CM 4

CRN 96-33-3

CMF C4 H6 O2



8 REFERENCES IN FILE CA (1967 TO DATE)

8 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 110:174689

REFERENCE 2: 109:39532

REFERENCE 3: 108:159082

REFERENCE 4: 108:152091

REFERENCE 5: 108:151781

REFERENCE 6: 108:114281

REFERENCE 7: 108:61428

REFERENCE 8: 108:57983

L89 ANSWER 97 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 111984-95-3 REGISTRY

CN 2-Propenoic acid, 2-methyl-, sodium salt, polymer with 2-methyl-1-propene  
(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with sodium 2-methyl-2-propenoate (9CI)

MF (C4 H8 . C4 H6 O2 . Na)x

CI PMS

PCT Polyacrylic, Polyolefin

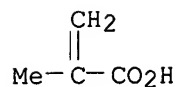
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 5536-61-8 (79-41-4)

CMF C4 H6 O2 . Na

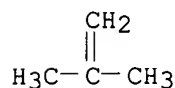


● Na

CM 2

CRN 115-11-7

CMF C4 H8



2 REFERENCES IN FILE CA (1967 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 112:153711

REFERENCE 2: 108:17788

L89 ANSWER 98 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 111575-31-6 REGISTRY

CN 2-Butenedioic acid (2Z)-, polymer with butanedioic acid and  
2-methyl-1-propene, ammonium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with butanedioic acid and (Z)-2-butenedioic  
acid, ammonium saltCN 1-Propene, 2-methyl-, polymer with butanedioic acid and (2Z)-2-butenedioic  
acid, ammonium salt (9CI)CN 2-Butenedioic acid (Z)-, polymer with butanedioic acid and  
2-methyl-1-propene, ammonium saltCN Butanedioic acid, polymer with (2Z)-2-butenedioic acid and  
2-methyl-1-propene, ammonium salt (9CI)CN Butanedioic acid, polymer with (Z)-2-butenedioic acid and  
2-methyl-1-propene, ammonium salt

FS STEREOSEARCH

MF (C4 H8 . C4 H6 O4 . C4 H4 O4)x . x H3 N

PCT Polyolefin, Polyether, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS

CM 1

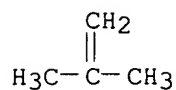
CRN 111575-30-5

CMF (C4 H8 . C4 H6 O4 . C4 H4 O4)x

CCI PMS

CM 2

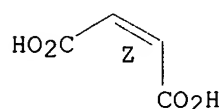
CRN 115-11-7  
CMF C4 H8



CM 3

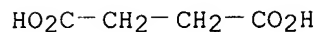
CRN 110-16-7  
CMF C4 H4 O4

Double bond geometry as shown.



CM 4

CRN 110-15-6  
CMF C4 H6 O4



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 107:237584

L89 ANSWER 99 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 111575-30-5 REGISTRY

CN 2-Butenedioic acid (2Z)-, polymer with butanedioic acid and  
2-methyl-1-propene (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with butanedioic acid and (Z)-2-butenedioic acid

CN 1-Propene, 2-methyl-, polymer with butanedioic acid and (2Z)-2-butenedioic acid (9CI)

CN 2-Butenedioic acid (Z)-, polymer with butanedioic acid and 2-methyl-1-propene

CN Butanedioic acid, polymer with (2Z)-2-butenedioic acid and 2-methyl-1-propene (9CI)

CN Butanedioic acid, polymer with (Z)-2-butenedioic acid and 2-methyl-1-propene

FS STEREOSEARCH

MF (C4 H8 . C4 H6 O4 . C4 H4 O4)x

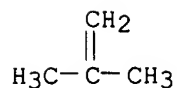
CI PMS, COM

PCT Polyolefin, Polyother, Polyvinyl

SR CA

CM 1

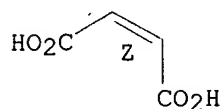
CRN 115-11-7  
CMF C4 H8



CM 2

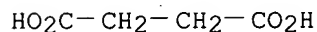
CRN 110-16-7  
CMF C4 H4 O4

Double bond geometry as shown.



CM 3

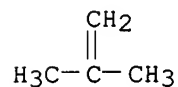
CRN 110-15-6  
CMF C4 H6 O4



L89 ANSWER 100 OF 155 REGISTRY COPYRIGHT 2002 ACS  
 RN 110171-93-2 REGISTRY  
 CN 2,5-Furandione, polymer with 2-methyl-1-propene, alternating (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, alternating (9CI)  
 OTHER NAMES:  
 CN IM 10  
 CN Isobam 10  
 CN Isobutene-maleic anhydride alternating copolymer  
 CN Isobutylene-maleic anhydride alternating copolymer  
 MF (C4 H8 . C4 H2 O3)x  
 CI PMS, COM  
 PCT Polyolefin, Polyvinyl  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL

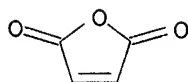
CM 1

CRN 115-11-7  
CMF C4 H8



CM 2

CRN 108-31-6  
CMF C4 H2 O3



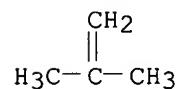
56 REFERENCES IN FILE CA (1967 TO DATE)  
23 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
56 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 137:110030  
REFERENCE 2: 137:21022  
REFERENCE 3: 136:38330  
REFERENCE 4: 136:38329  
REFERENCE 5: 136:38091  
REFERENCE 6: 135:378797  
REFERENCE 7: 135:273403  
REFERENCE 8: 135:243049  
REFERENCE 9: 135:181106  
REFERENCE 10: 134:42841

L89 ANSWER 101 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 109800-39-7 REGISTRY  
CN 2,5-Furandione, polymer with 2-methyl-1-propene, graft (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, graft (9CI)  
MF (C4 H8 . C4 H2 O3)x  
CI PMS  
PCT Polyolefin, Polyvinyl  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL

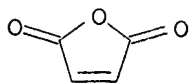
CM 1

CRN 115-11-7  
CMF C4 H8



CM 2

CRN 108-31-6  
CMF C4 H2 O3



3 REFERENCES IN FILE CA (1967 TO DATE)  
 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 123:33940

REFERENCE 2: 107:155890

REFERENCE 3: 107:80816

L89 ANSWER 102 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 109180-43-0 REGISTRY

CN 2-Propenoic acid, 2-methyl-, docosyl ester, polymer with 2,5-furandione  
 and 2-methyl-1-propene, ammonium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with docosyl 2-methyl-2-propenoate and  
 2,5-furandione, ammonium salt (9CI)

CN 2,5-Furandione, polymer with 2-methyl-1-propene and docosyl  
 2-methyl-2-propenoate, ammonium salt (9CI)

MF (C26 H50 O2 . C4 H8 . C4 H2 O3)x . x H3 N

PCT Polyacrylic, Polyolefin, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 103875-04-3

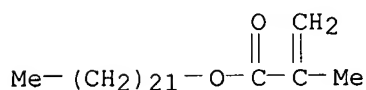
CMF (C26 H50 O2 . C4 H8 . C4 H2 O3)x

CCI PMS

CM 2

CRN 16669-27-5

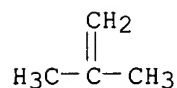
CMF C26 H50 O2



CM 3

CRN 115-11-7

CMF C4 H8

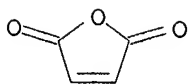


CM 4

CRN 108-31-6

CMF C4 H2 O3





2 REFERENCES IN FILE CA (1967 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 115:184619

REFERENCE 2: 107:42971

L89 ANSWER 103 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 107162-97-0 REGISTRY

CN 2,5-Furandione, polymer with ethenol and 2-methyl-1-propene, ammonium salt  
(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with ethenol and 2,5-furandione, ammonium  
salt (9CI)

CN Ethenol, polymer with 2,5-furandione and 2-methyl-1-propene, ammonium salt  
(9CI)

MF (C4 H8 . C4 H2 O3 . C2 H4 O)x . x H3 N

PCT Polyolefin, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 52641-05-1

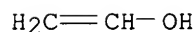
CMF (C4 H8 . C4 H2 O3 . C2 H4 O)x

CCI PMS

CM 2

CRN 557-75-5

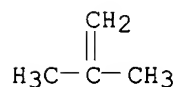
CMF C2 H4 O



CM 3

CRN 115-11-7

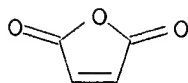
CMF C4 H8



CM 4

CRN 108-31-6

CMF C4 H2 O3



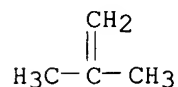
1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 106:104086

L89 ANSWER 104 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 106818-17-1 REGISTRY  
CN 2,5-Furandione, dihydro-, polymer with 2-methyl-1-propene (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1-Propene, 2-methyl-, polymer with dihydro-2,5-furandione (9CI)  
OTHER NAMES:  
CN Isobutylene-succinic anhydride copolymer  
MF (C4 H8 . C4 H4 O3)x  
CI PMS  
PCT Polyolefin, Polyother  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL

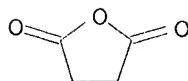
CM 1

CRN 115-11-7  
CMF C4 H8



CM 2

CRN 108-30-5  
CMF C4 H4 O3



6 REFERENCES IN FILE CA (1967 TO DATE)  
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
6 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 133:290110

REFERENCE 2: 130:41972

REFERENCE 3: 129:205088

REFERENCE 4: 125:118960

REFERENCE 5: 124:118614

REFERENCE 6: 106:89916

L89 ANSWER 105 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 105062-76-8 REGISTRY

CN 2-Propenoic acid, methyl ester, polymer with 2,5-furandione and 2-methyl-1-propene, sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione and methyl 2-propenoate, sodium salt (9CI)

CN 2,5-Furandione, polymer with 2-methyl-1-propene and methyl 2-propenoate, sodium salt (9CI)

OTHER NAMES:

CN Isobutylene-maleic anhydride-methyl acrylate copolymer sodium salt

MF (C4 H8 . C4 H6 O2 . C4 H2 O3)x . x Na

PCT Polyacrylic, Polyolefin, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 53367-76-3

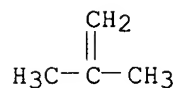
CMF (C4 H8 . C4 H6 O2 . C4 H2 O3)x

CCI PMS

CM 2

CRN 115-11-7

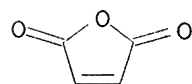
CMF C4 H8



CM 3

CRN 108-31-6

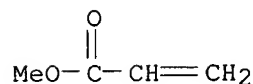
CMF C4 H2 O3



CM 4

CRN 96-33-3

CMF C4 H6 O2



9 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

9 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 113:61256

REFERENCE 2: 112:218409  
 REFERENCE 3: 111:196709  
 REFERENCE 4: 110:96804  
 REFERENCE 5: 108:39722  
 REFERENCE 6: 107:177318  
 REFERENCE 7: 107:176762  
 REFERENCE 8: 107:117046  
 REFERENCE 9: 105:192455

L89 ANSWER 106 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 103193-63-1 REGISTRY

CN 2-Butenedioic acid (2Z)-, polymer with disodium (2Z)-2-butenedioate and 2-methyl-1-propene (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with (2Z)-2-butenedioic acid and disodium (2Z)-2-butenedioate (9CI)

CN 1-Propene, 2-methyl-, polymer with (Z)-2-butenedioic acid and (Z)-disodium 2-butenedioate

CN 2-Butenedioic acid (2Z)-, disodium salt, polymer with (2Z)-2-butenedioic acid and 2-methyl-1-propene (9CI)

CN 2-Butenedioic acid (Z)-, disodium salt, polymer with (Z)-2-butenedioic acid and 2-methyl-1-propene

CN 2-Butenedioic acid (Z)-, polymer with (Z)-disodium 2-butenedioate and 2-methyl-1-propene

OTHER NAMES:

CN Isobutylene-maleic acid-sodium maleate copolymer

FS STEREOSEARCH

MF (C4 H8 . C4 H4 O4 . C4 H4 O4 . 2 Na)x

CI PMS

PCT Polyolefin, Polyvinyl

SR CA

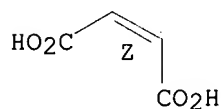
LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 371-47-1 (110-16-7)

CMF C4 H4 O4 . 2 Na

Double bond geometry as shown.

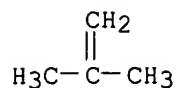


2 Na

CM 2

CRN 115-11-7

CMF C4 H8

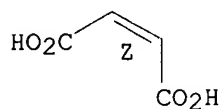


CM 3

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



2 REFERENCES IN FILE CA (1967 TO DATE)

2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 125:13001

REFERENCE 2: 105:44239

L89 ANSWER 107 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 101944-31-4 REGISTRY

CN 2-Propenoic acid, 2-methyl-, sodium salt, homopolymer, compd. with  
2-methyl-1-propene (1:1) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, compd. with sodium 2-methyl-2-propenoate homopolymer  
(1:1) (9CI)

MF C4 H8 . (C4 H6 O2 . Na)x

PCT Polyacrylic

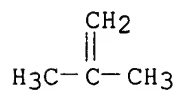
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 115-11-7

CMF C4 H8



CM 2

CRN 25086-62-8

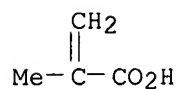
CMF (C4 H6 O2 . Na)x

CCI PMS

CM 3

CRN 5536-61-8 (79-41-4)

CMF C4 H6 O2 . Na



● Na

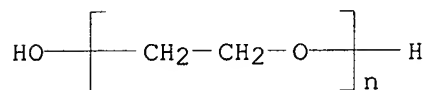
1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 104:202345

L89 ANSWER 108 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 101706-97-2 REGISTRY  
CN 2,5-Furandione, polymer with 1-propene, ester with .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1-Propene, polymer with 2,5-furandione, ester with .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) (9CI)  
MF (C4 H2 O3 . C3 H6)x . x (C2 H4 O)n H2 O  
PCT Polyether, Polyolefin, Polyvinyl  
SR CA  
LC STN Files: CA, CAPLUS

CM 1

CRN 25322-68-3  
CMF (C2 H4 O)n H2 O  
CCI PMS

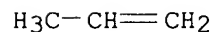


CM 2

CRN 25722-45-6  
CMF (C4 H2 O3 . C3 H6)x  
CCI PMS

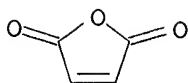
CM 3

CRN 115-07-1  
CMF C3 H6



CM 4

CRN 108-31-6  
CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 104:169108

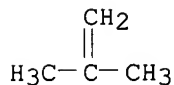
L89 ANSWER 109 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 98701-96-3 REGISTRY  
CN 2,5-Furandione, polymer with 2-methyl-1-propene, ammonium magnesium salt  
(9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, ammonium magnesium salt  
(9CI)  
OTHER NAMES:  
CN Isobutylene-maleic anhydride copolymer ammonium magnesium salt  
MF (C4 H8 . C4 H2 O3)x . x H3 N . x Mg  
PCT Polyolefin, Polyvinyl  
SR CA  
LC STN Files: CA, CAPLUS

CM 1

CRN 26426-80-2  
CMF (C4 H8 . C4 H2 O3)x  
CCI PMS

CM 2

CRN 115-11-7  
CMF C4 H8



CM 3

CRN 108-31-6  
CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 103:162097

L89 ANSWER 110 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 98701-94-1 REGISTRY  
CN 2,5-Furandione, polymer with 2-methyl-1-propene, calcium sodium salt (9CI)  
(CA INDEX NAME)

## OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, calcium sodium salt (9CI)

## OTHER NAMES:

CN Isobutylene-maleic anhydride copolymer calcium sodium salt

MF (C4 H8 . C4 H2 O3)x . x Ca . x Na

PCT Polyolefin, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 26426-80-2

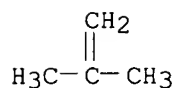
CMF (C4 H8 . C4 H2 O3)x

CCI PMS

CM 2

CRN 115-11-7

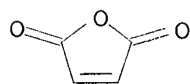
CMF C4 H8



CM 3

CRN 108-31-6

CMF C4 H2 O3



2 REFERENCES IN FILE CA (1967 TO DATE)

2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 115:188778

REFERENCE 2: 103:162097

L89 ANSWER 111 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 97939-57-6 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene, compd. with 2,2',2''-nitrilotris[ethanol] (9CI) (CA INDEX NAME)

## OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, compd. with 2,2',2''-nitrilotris[ethanol] (9CI)

CN Ethanol, 2,2',2''-nitrilotris-, compd. with 2,5-furandione polymer with 2-methyl-1-propene (9CI)

MF C6 H15 N O3 . x (C4 H8 . C4 H2 O3)x

PCT Polyolefin, Polyvinyl

SR CA

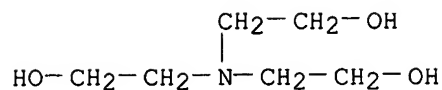
LC STN Files: CA, CAPLUS

CM 1

CRN 102-71-6



CMF C6 H15 N O3

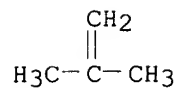


CM 2

CRN 26426-80-2  
 CMF (C4 H8 . C4 H2 O3)x  
 CCI PMS

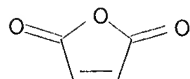
CM 3

CRN 115-11-7  
 CMF C4 H8



CM 4

CRN 108-31-6  
 CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 103:107497

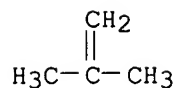
L89 ANSWER 112 OF 155 REGISTRY COPYRIGHT 2002 ACS  
 RN 97696-05-4 REGISTRY  
 CN 2-Propenoic acid, 2-methyl-, polymer with 2-methyl-1-propene, sodium salt  
 (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 1-Propene, 2-methyl-, polymer with 2-methyl-2-propenoic acid, sodium salt  
 (9CI)  
 MF (C4 H8 . C4 H6 O2)x . x Na  
 PCT Polyacrylic, Polyolefin  
 SR CA  
 LC STN Files: CA, CAPLUS

CM 1

CRN 54406-39-2  
 CMF (C4 H8 . C4 H6 O2)x  
 CCI PMS

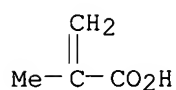
CM 2

CRN 115-11-7  
CMF C4 H8



CM 3

CRN 79-41-4  
CMF C4 H6 O2



2 REFERENCES IN FILE CA (1967 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 103:107442

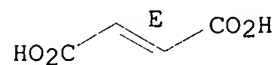
REFERENCE 2: 103:73674

L89 ANSWER 113 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 96451-27-3 REGISTRY  
CN 2-Butenedioic acid (2E)-, disodium salt, polymer with 2-methyl-1-propene  
(9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1-Propene, 2-methyl-, polymer with (E)-disodium 2-butenedioate (9CI)  
CN 2-Butenedioic acid (E)-, disodium salt, polymer with 2-methyl-1-propene  
FS STEREOSEARCH  
MF (C4 H8 . C4 H4 O4 . 2 Na)x  
CI PMS  
PCT Polyolefin, Polyvinyl  
LC STN Files: CA, CAPLUS

CM 1

CRN 17013-01-3 (110-17-8)  
CMF C4 H4 O4 . 2 Na

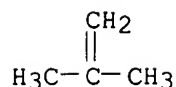
Double bond geometry as shown.



● 2 Na

CM 2

CRN 115-11-7  
CMF C4 H8



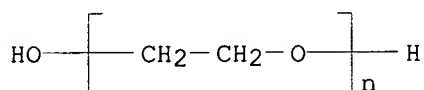
1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 102:208275

L89 ANSWER 114 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 94558-62-0 REGISTRY  
CN 2-Butenedioic acid (2Z)-, polymer with ethene and .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 2-Butenedioic acid (Z)-, polymer with ethene and .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl)  
CN Ethene, polymer with (2Z)-2-butenedioic acid and .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) (9CI)  
CN Ethene, polymer with (Z)-2-butenedioic acid and .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl)  
CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, polymer with (2Z)-2-butenedioic acid and ethene (9CI)  
CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, polymer with (Z)-2-butenedioic acid and ethene  
FS STEREOSEARCH  
MF (C4 H4 O4 . (C2 H4 O)n H2 O . C2 H4)x  
CI PMS  
PCT Polyester, Polyester formed, Polyether, Polyolefin, Polyvinyl  
LC STN Files: CA, CAPLUS

CM 1

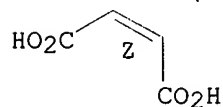
CRN 25322-68-3  
CMF (C2 H4 O)n H2 O  
CCI PMS



CM 2

CRN 110-16-7  
CMF C4 H4 O4

Double bond geometry as shown.



CM 3

CRN 74-85-1  
CMF C2 H4



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 102:62716

L89 ANSWER 115 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 91778-14-2 REGISTRY

CN 2-Propenoic acid, polymer with 2,5-furandione and 2-methyl-1-propene,  
sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione and 2-propenoic acid,  
sodium salt (9CI)

CN 2,5-Furandione, polymer with 2-methyl-1-propene and 2-propenoic acid,  
sodium salt (9CI)

MF (C4 H8 . C4 H2 O3 . C3 H4 O2)x . x Na

PCT Polyacrylic, Polyolefin, Polyvinyl

LC STN Files: CA, CAPLUS

CM 1

CRN 91778-13-1

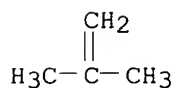
CMF (C4 H8 . C4 H2 O3 . C3 H4 O2)x

CCI PMS

CM 2

CRN 115-11-7

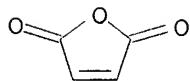
CMF C4 H8



CM 3

CRN 108-31-6

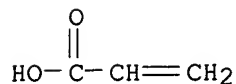
CMF C4 H2 O3



CM 4

CRN 79-10-7

CMF C3 H4 O2



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 101:113822

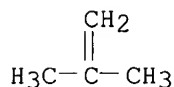
L89 ANSWER 116 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 91778-04-0 REGISTRY  
CN 2,5-Furandione, polymer with methoxyethene and 2-methyl-1-propene, sodium salt (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1-Propene, 2-methyl-, polymer with 2,5-furandione and methoxyethene, sodium salt (9CI)  
CN Ethene, methoxy-, polymer with 2,5-furandione and 2-methyl-1-propene, sodium salt (9CI)  
MF (C4 H8 . C4 H2 O3 . C3 H6 O)x . x Na  
PCT Polyolefin, Polyvinyl  
LC STN Files: CA, CAPLUS

CM 1

CRN 91778-03-9  
CMF (C4 H8 . C4 H2 O3 . C3 H6 O)x  
CCI PMS

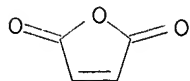
CM 2

CRN 115-11-7  
CMF C4 H8



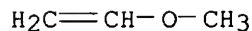
CM 3

CRN 108-31-6  
CMF C4 H2 O3



CM 4

CRN 107-25-5  
CMF C3 H6 O



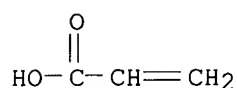
1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 101:113821

L89 ANSWER 117 OF 155 REGISTRY COPYRIGHT 2002 ACS  
 RN 84420-43-9 REGISTRY  
 CN Butanedioic acid, polymer with .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl), mono-2-propenoate (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, polymer with butanedioic acid, mono-2-propenoate (9CI)  
 MF (C4 H6 O4 . (C2 H4 O)n H2 O)x . C3 H4 O2  
 CI COM  
 PCT Polyester, Polyester formed, Polyether

CM 1

CRN 79-10-7  
 CMF C3 H4 O2

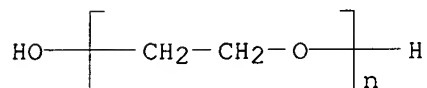


CM 2

CRN 9041-79-6  
 CMF (C4 H6 O4 . (C2 H4 O)n H2 O)x  
 CCI PMS

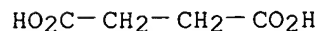
CM 3

CRN 25322-68-3  
 CMF (C2 H4 O)n H2 O  
 CCI PMS



CM 4

CRN 110-15-6  
 CMF C4 H6 O4



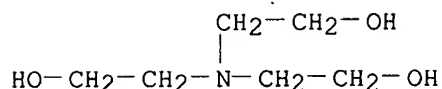
L89 ANSWER 118 OF 155 REGISTRY COPYRIGHT 2002 ACS  
 RN 78537-83-4 REGISTRY  
 CN 2,5-Furandione, polymer with 1-propene trimer, compd. with 2,2',2''-nitrilotris[ethanol] (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 1-Propene, trimer, polymer with 2,5-furandione, compd. with 2,2',2''-nitrilotris[ethanol] (9CI)  
 CN Ethanol, 2,2',2''-nitrilotris-, compd. with 2,5-furandione polymer with 1-propene trimer (9CI)  
 MF C6 H15 N O3 . x (C4 H2 O3 . (C3 H6)3)x  
 PCT Polyolefin, Polyvinyl

LC STN Files: CA, CAPLUS

CM 1

CRN 102-71-6

CMF C6 H15 N O3



CM 2

CRN 78537-82-3

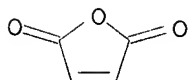
CMF (C4 H2 O3 . (C3 H6) 3) x

CCI PMS

CM 3

CRN 108-31-6

CMF C4 H2 O3



CM 4

CRN 13987-01-4

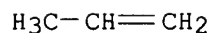
CMF (C3 H6) 3

CCI PMS

CM 5

CRN 115-07-1

CMF C3 H6



1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 95:101406

L89 ANSWER 119 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 77045-94-4 REGISTRY

CN 2-Butenedioic acid (2Z)-, polymer with 2-methyl-1-propene, potassium salt  
(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with (2Z)-2-butenedioic acid, potassium salt  
(9CI)

CN 1-Propene, 2-methyl-, polymer with (Z)-2-butenedioic acid, potassium salt

CN 2-Butenedioic acid (Z)-, polymer with 2-methyl-1-propene, potassium salt

FS STEREOSEARCH

MF (C4 H8 . C4 H4 O4) x . x K

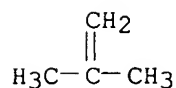
PCT Polyolefin, Polyvinyl  
LC STN Files: CA, CAPLUS

CM 1

CRN 28327-80-2  
CMF (C4 H8 . C4 H4 O4)x  
CCI PMS

CM 2

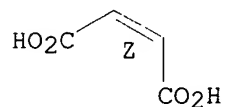
CRN 115-11-7  
CMF C4 H8



CM 3

CRN 110-16-7  
CMF C4 H4 O4

Double bond geometry as shown.



3 REFERENCES IN FILE CA (1967 TO DATE)  
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 112:38079

REFERENCE 2: 111:41540

REFERENCE 3: 94:192796

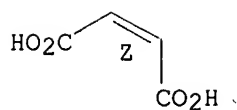
L89 ANSWER 120 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 76796-48-0 REGISTRY  
CN 2-Butenedioic acid (2Z)-, monosodium salt, polymer with 2-methyl-1-propene  
(9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1-Propene, 2-methyl-, polymer with (Z)-sodium hydrogen 2-butenedioate  
(9CI)  
CN 2-Butenedioic acid (Z)-, monosodium salt, polymer with 2-methyl-1-propene  
FS STEREOSEARCH  
MF (C4 H8 . C4 H4 O4 . Na)x  
CI PMS  
PCT Polyolefin, Polyvinyl  
LC STN Files: CA, CAPLUS

CM 1

CRN 3105-55-3 (110-16-7)  
CMF C4 H4 O4 . Na

Double bond geometry as shown.



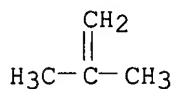


● Na

CM 2

CRN 115-11-7

CMF C4 H8



2 REFERENCES IN FILE CA (1967 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 118:29891

REFERENCE 2: 94:112543

L89 ANSWER 121 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 76465-84-4 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene and 2,4,4-trimethylpentene, ammonium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione and 2,4,4-trimethylpentene, ammonium salt (9CI)

CN Pentene, 2,4,4-trimethyl-, polymer with 2,5-furandione and 2-methyl-1-propene, ammonium salt (9CI)

MF (C8 H16 . C4 H8 . C4 H2 O3)x . x H3 N

PCT Polyolefin, Polyether, Polyvinyl

LC STN Files: CA, CAPLUS

CM 1

CRN 67669-76-5

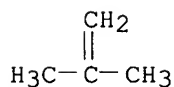
CMF (C8 H16 . C4 H8 . C4 H2 O3)x

CCI PMS

CM 2

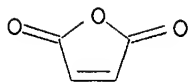
CRN 115-11-7

CMF C4 H8



CM 3

CRN 108-31-6  
CMF C4 H2 O3

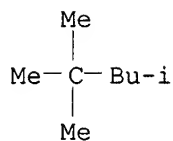


CM 4

CRN 25167-70-8  
CMF C8 H16  
CCI IDS

CM 5

CRN 540-84-1  
CMF C8 H18



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 94:74760

L89 ANSWER 122 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 71015-79-7 REGISTRY

CN 1H-Pyrrole-2,5-dione, polymer with 2,5-furandione and 2-methyl-1-propene, ammonium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione and 1H-pyrrole-2,5-dione, ammonium salt (9CI)

CN 2,5-Furandione, polymer with 2-methyl-1-propene and 1H-pyrrole-2,5-dione, ammonium salt (9CI)

OTHER NAMES:

CN Isobutylene-maleic anhydride-maleimide copolymer ammonium salt

MF (C4 H8 . C4 H3 N O2 . C4 H2 O3)x . x H3 N

PCT Polyolefin, Polyvinyl

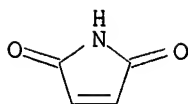
LC STN Files: CA, CAPLUS

CM 1

CRN 33154-82-4  
CMF (C4 H8 . C4 H3 N O2 . C4 H2 O3)x  
CCI PMS

CM 2

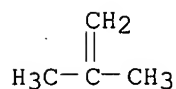
CRN 541-59-3  
CMF C4 H3 N O2



CM 3

CRN 115-11-7

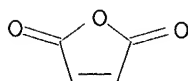
CMF C4 H8



CM 4

CRN 108-31-6

CMF C4 H2 O3



2 REFERENCES IN FILE CA (1967 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 103:38348

REFERENCE 2: 91:75311

L89 ANSWER 123 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 70739-68-3 REGISTRY

CN 1H-Pyrrole-2,5-dione, polymer with 2,5-furandione and 2-methyl-1-propene,  
 sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione and 1H-pyrrole-2,5-  
 dione, sodium salt (9CI)

CN 2,5-Furandione, polymer with 2-methyl-1-propene and 1H-pyrrole-2,5-dione,  
 sodium salt (9CI)

MF (C4 H8 . C4 H3 N O2 . C4 H2 O3)x . x Na

PCT Polyolefin, Polyvinyl

LC STN Files: CA, CAPLUS

CM 1

CRN 33154-82-4

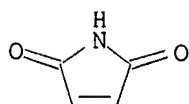
CMF (C4 H8 . C4 H3 N O2 . C4 H2 O3)x

CCI PMS

CM 2

CRN 541-59-3

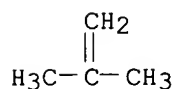
CMF C4 H3 N O2



CM 3

CRN 115-11-7

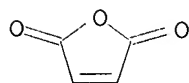
CMF C4 H8



CM 4

CRN 108-31-6

CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 91:58132

L89 ANSWER 124 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 70595-19-6 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene, 2-ethylhexyl ester, ammonium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, 2-ethylhexyl ester, ammonium salt (9CI)

OTHER NAMES:

CN Isobutylene-maleic anhydride copolymer 2-ethylhexyl ester ammonium salt

MF C8 H18 O . x (C4 H8 . C4 H2 O3)x . x H3 N

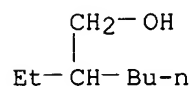
PCT Polyolefin, Polyvinyl

LC STN Files: CA, CAPLUS

CM 1

CRN 104-76-7

CMF C8 H18 O



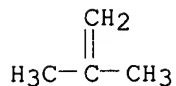
CM 2

CRN 26426-80-2

CMF (C4 H8 . C4 H2 O3)x  
CCI PMS

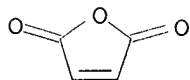
CM 3

CRN 115-11-7  
CMF C4 H8



CM 4

CRN 108-31-6  
CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 91:41018

L89 ANSWER 125 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 70595-18-5 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene, 2-butoxyethyl ester, ammonium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, 2-butoxyethyl ester, ammonium salt (9CI)

OTHER NAMES:

CN Isobutylene-maleic anhydride copolymer 2-butoxyethyl ester ammonium salt

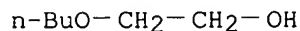
MF C6 H14 O2 . x (C4 H8 . C4 H2 O3)x . x H3 N

PCT Polyolefin, Polyvinyl

LC STN Files: CA, CAPLUS

CM 1

CRN 111-76-2  
CMF C6 H14 O2



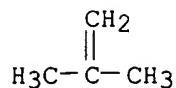
CM 2

CRN 26426-80-2  
CMF (C4 H8 . C4 H2 O3)x  
CCI PMS

CM 3

CRN 115-11-7

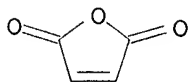
CMF C4 H8



CM 4

CRN 108-31-6

CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 91:41018

L89 ANSWER 126 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 69506-52-1 REGISTRY

CN 2-Butenedioic acid (2Z)-, polymer with 2-methyl-1-propene, ammonium salt  
(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with (2Z)-2-butenedioic acid, ammonium salt  
(9CI)

CN 1-Propene, 2-methyl-, polymer with (Z)-2-butenedioic acid, ammonium salt

CN 2-Butenedioic acid (Z)-, polymer with 2-methyl-1-propene, ammonium salt

OTHER NAMES:

CN Isobutylene-maleic acid copolymer ammonium salt

FS STEREOSEARCH

MF (C4 H8 . C4 H4 O4)x . x H3 N

PCT Polyolefin, Polyvinyl

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 28327-80-2

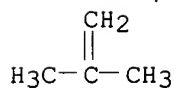
CMF (C4 H8 . C4 H4 O4)x

CCI PMS

CM 2

CRN 115-11-7

CMF C4 H8

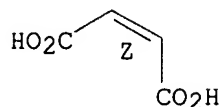


CM 3

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



6 REFERENCES IN FILE CA (1967 TO DATE)  
6 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 125:288875

REFERENCE 2: 121:191466

REFERENCE 3: 112:38079

REFERENCE 4: 111:216030

REFERENCE 5: 108:229742

REFERENCE 6: 90:138771

L89 ANSWER 127 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 68573-63-7 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene, potassium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, potassium salt (9CI)

MF (C4 H8 . C4 H2 O3)x . x K

PCT Polyolefin, Polyvinyl

LC STN Files: CA, CAPLUS

CM 1

CRN 26426-80-2

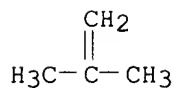
CMF (C4 H8 . C4 H2 O3)x

CCI PMS

CM 2

CRN 115-11-7

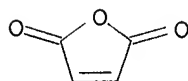
CMF C4 H8



CM 3

CRN 108-31-6

CMF C4 H2 O3



4 REFERENCES IN FILE CA (1967 TO DATE)  
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 109:195111

REFERENCE 2: 103:107497

REFERENCE 3: 102:15030

REFERENCE 4: 90:10314

L89 ANSWER 128 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 67298-43-5 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene, butyl ester, ammonium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, butyl ester, ammonium salt (9CI)

MF C4 H10 O . x (C4 H8 . C4 H2 O3)x . x H3 N

PCT Polyolefin, Polyvinyl

LC STN Files: CA, CAPLUS

CM 1

CRN 71-36-3

CMF C4 H10 O

H<sub>3</sub>C-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-OH

CM 2

CRN 26426-80-2

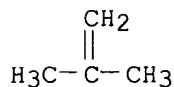
CMF (C4 H8 . C4 H2 O3)x

CCI PMS

CM 3

CRN 115-11-7

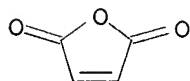
CMF C4 H8



CM 4

CRN 108-31-6

CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)



REFERENCE 1: 89:111734

L89 ANSWER 129 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 65395-07-5 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene, magnesium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, magnesium salt (9CI)

OTHER NAMES:

CN Isobutylene-maleic anhydride copolymer magnesium salt

MF (C4 H8 . C4 H2 O3)x . x Mg

PCT Polyolefin, Polyvinyl

LC STN Files: CA, CAPLUS

CM 1

CRN 26426-80-2

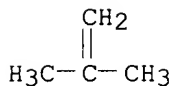
CMF (C4 H8 . C4 H2 O3)x

CCI PMS

CM 2

CRN 115-11-7

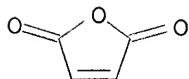
CMF C4 H8



CM 3

CRN 108-31-6

CMF C4 H2 O3



3 REFERENCES IN FILE CA (1967 TO DATE)

3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 94:32542

REFERENCE 2: 92:219260

REFERENCE 3: 88:39081

L89 ANSWER 130 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 65395-06-4 REGISTRY

CN 2,5-Furandione, polymer with 1,3-butadiene and 2-methyl-1-propene, magnesium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,3-Butadiene, polymer with 2,5-furandione and 2-methyl-1-propene, magnesium salt (9CI)

CN 1-Propene, 2-methyl-, polymer with 1,3-butadiene and 2,5-furandione, magnesium salt (9CI)

MF (C4 H8 . C4 H6 . C4 H2 O3)x . x Mg

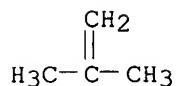
PCT Polyolefin, Polyvinyl  
LC STN Files: CA, CAPLUS

CM 1

CRN 33518-77-3  
CMF (C4 H8 . C4 H6 . C4 H2 O3)x  
CCI PMS

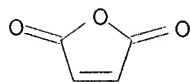
CM 2

CRN 115-11-7  
CMF C4 H8



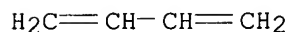
CM 3

CRN 108-31-6  
CMF C4 H2 O3



CM 4

CRN 106-99-0  
CMF C4 H6



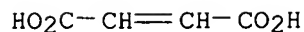
1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 88:39081

L89 ANSWER 131 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 64111-93-9 REGISTRY  
CN 2-Butenedioic acid, disodium salt, polymer with 2-methyl-1-propene (9CI)  
(CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1-Propene, 2-methyl-, polymer with disodium 2-butenedioate (9CI)  
MF (C4 H8 . C4 H4 O4 . 2 Na)x  
CI PMS  
PCT Polyolefin, Polyvinyl  
LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 54060-75-2 (6915-18-0)  
CMF C4 H4 O4 . 2 Na

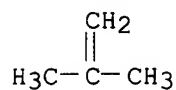


●2 Na

CM 2

CRN 115-11-7

CMF C4 H8



2 REFERENCES IN FILE CA (1967 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 127:154576

REFERENCE 2: 87:125349

L89 ANSWER 132 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 63066-88-6 REGISTRY

CN 2-Butenedioic acid (2Z)-, monoammonium salt, polymer with  
2-methyl-1-propene (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with (Z)-ammonium hydrogen 2-butenedioate

CN 1-Propene, 2-methyl-, polymer with ammonium hydrogen (2Z)-2-butenedioate  
(9CI)

CN 2-Butenedioic acid (Z)-, monoammonium salt, polymer with  
2-methyl-1-propene

OTHER NAMES:

CN Ammonium maleate-isobutylene copolymer

FS STEREOSEARCH

MF (C4 H8 . C4 H4 O4 . H3 N)x

CI PMS

PCT Polyolefin, Polyvinyl

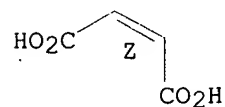
LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL

CM 1

CRN 44742-89-4 (110-16-7)

CMF C4 H4 O4 . H3 N

Double bond geometry as shown.

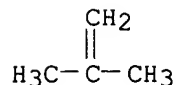


NH<sub>3</sub>

CM 2

CRN 115-11-7

CMF C4 H8



3 REFERENCES IN FILE CA (1967 TO DATE)

3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 133:81623

REFERENCE 2: 128:41646

REFERENCE 3: 87:24379

L89 ANSWER 133 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN. 62066-58-4 REGISTRY

CN 2-Butenedioic acid (2Z)-, polymer with 1-propene, compd. with  
2,2',2''-nitrilotris[ethanol], calcium sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, polymer with (2Z)-2-butenedioic acid, compd. with  
2,2',2''-nitrilotris[ethanol], calcium sodium salt (9CI)CN 1-Propene, polymer with (Z)-2-butenedioic acid, compd. with  
2,2',2''-nitrilotris[ethanol], calcium sodium saltCN 2-Butenedioic acid (Z)-, polymer with 1-propene, compd. with  
2,2',2''-nitrilotris[ethanol], calcium sodium saltCN Ethanol, 2,2',2''-nitrilotris-, compd. with (2Z)-2-butenedioic acid  
polymer with 1-propene, calcium sodium salt (9CI)CN Ethanol, 2,2',2''-nitrilotris-, compd. with (Z)-2-butenedioic acid polymer  
with 1-propene, calcium sodium salt

OTHER NAMES:

CN Maleic acid-propylene copolymer calcium sodium triethanolamine salt

FS STEREOSEARCH

MF C6 H15 N O3 . x (C4 H4 O4 . C3 H6)x . x Ca . x Na

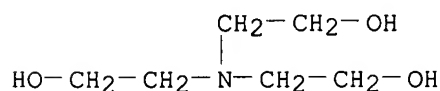
PCT Polyolefin, Polyvinyl

LC STN Files: CA, CAPLUS

CM 1

CRN 102-71-6

CMF C6 H15 N O3



CM 2

CRN 38809-92-6

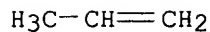
CMF (C4 H4 O4 . C3 H6)x

CCI PMS

CM 3

CRN 115-07-1

CMF C3 H6

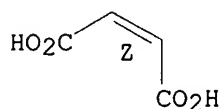


CM 4

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 86:123123

L89 ANSWER 134 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 61577-20-6 REGISTRY

CN 2,5-Furandione, polymer with ethene and .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Ethene, polymer with 2,5-furandione and .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) (9CI)

CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, polymer with ethene and 2,5-furandione (9CI)

MF (C4 H2 O3 . (C2 H4 O)n H2 O . C2 H4)x

CI PMS

PCT Polyester, Polyester formed, Polyether, Polyolefin, Polyvinyl

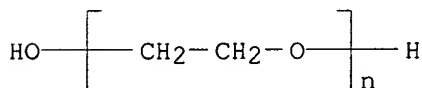
LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL

CM 1

CRN 25322-68-3

CMF (C2 H4 O)n H2 O

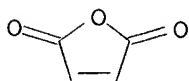
CCI PMS



CM 2

CRN 108-31-6

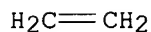
CMF C4 H2 O3



CM 3

CRN 74-85-1

CMF C2 H4



2 REFERENCES IN FILE CA (1967 TO DATE)

2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 101:92327

REFERENCE 2: 86:30513

L89 ANSWER 135 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 61389-90-0 REGISTRY

CN 2-Propenamide, N,N'-methylenebis-, polymer with 2,5-furandione and  
2-methyl-1-propene, ammonium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione and N,N'-methylenebis[2-  
propenamide], ammonium salt (9CI)CN 2,5-Furandione, polymer with N,N'-methylenebis[2-propenamide] and  
2-methyl-1-propene, ammonium salt (9CI)

MF (C7 H10 N2 O2 . C4 H8 . C4 H2 O3)x . x H3 N

PCT Polyacrylic, Polyolefin, Polyvinyl

LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL

CM 1

CRN 61389-89-7

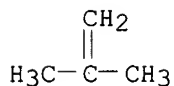
CMF (C7 H10 N2 O2 . C4 H8 . C4 H2 O3)x

CCI PMS

CM 2

CRN 115-11-7

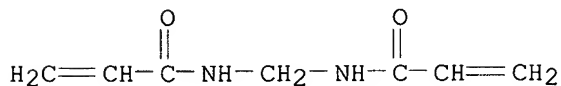
CMF C4 H8



CM 3

CRN 110-26-9

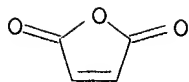
CMF C7 H10 N2 O2



CM 4

CRN 108-31-6

CMF C4 H2 O3



1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 86:18677

L89 ANSWER 136 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 60098-62-6 REGISTRY

CN 2-Butenedioic acid (2Z)-, polymer with 2-methyl-1-propene, octyl ester,  
 lithium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with (2Z)-2-butenedioic acid, octyl ester,  
 lithium salt (9CI)

CN 1-Propene, 2-methyl-, polymer with (Z)-2-butenedioic acid, octyl ester,  
 lithium salt

CN 2-Butenedioic acid (Z)-, polymer with 2-methyl-1-propene, octyl ester,  
 lithium salt

FS STEREOSEARCH

MF C8 H18 O . x (C4 H8 . C4 H4 O4)x . x Li

PCT Polyolefin, Polyvinyl

LC STN Files: CA, CAPLUS, TOXCENTER

CM 1

CRN 111-87-5

CMF C8 H18 O

HO-(CH<sub>2</sub>)<sub>7</sub>-Me

CM 2

CRN 28327-80-2

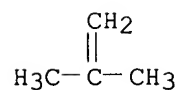
CMF (C4 H8 . C4 H4 O4)x

CCI PMS

CM 3

CRN 115-11-7

CMF C4 H8

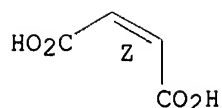


CM 4

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 85:95720

L89 ANSWER 137 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 60098-61-5 REGISTRY

CN 2-Butenedioic acid (2Z)-, polymer with 2-methyl-1-propene, methyl ester, sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with (2Z)-2-butenedioic acid, methyl ester, sodium salt (9CI)

CN 1-Propene, 2-methyl-, polymer with (Z)-2-butenedioic acid, methyl ester, sodium salt

CN 2-Butenedioic acid (Z)-, polymer with 2-methyl-1-propene, methyl ester, sodium salt

FS STEREOSEARCH

MF (C4 H8 . C4 H4 O4)x . x C H4 O . x Na

PCT Polyolefin, Polyvinyl

LC STN Files: CA, CAPLUS, TOXCENTER

CM 1

CRN 67-56-1

CMF C H4 O

H<sub>3</sub>C-OH

CM 2

CRN 28327-80-2

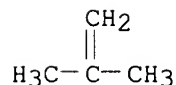
CMF (C4 H8 . C4 H4 O4)x

CCI PMS

CM 3

CRN 115-11-7

CMF C4 H8



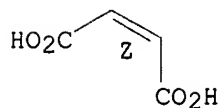
CM 4

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.





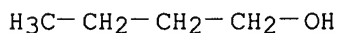
1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 85:95720

L89 ANSWER 138 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 60098-60-4 REGISTRY  
CN 2-Butenedioic acid (2Z)-, polymer with 2-methyl-1-propene, butyl ester, ammonium salt (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1-Propene, 2-methyl-, polymer with (2Z)-2-butenedioic acid, butyl ester, ammonium salt (9CI)  
CN 1-Propene, 2-methyl-, polymer with (Z)-2-butenedioic acid, butyl ester, ammonium salt  
CN 2-Butenedioic acid (Z)-, polymer with 2-methyl-1-propene, butyl ester, ammonium salt  
FS STEREOSEARCH  
MF C4 H10 O . x (C4 H8 . C4 H4 O4)x . x H3 N  
PCT Polyolefin, Polyvinyl  
LC STN Files: CA, CAPLUS, TOXCENTER

CM 1

CRN 71-36-3  
CMF C4 H10 O

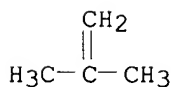


CM 2

CRN 28327-80-2  
CMF (C4 H8 . C4 H4 O4)x  
CCI PMS

CM 3

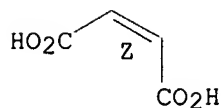
CRN 115-11-7  
CMF C4 H8



CM 4

CRN 110-16-7  
CMF C4 H4 O4

Double bond geometry as shown.



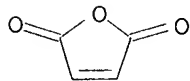
1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 85:95720

L89 ANSWER 139 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 59931-03-2 REGISTRY  
CN 2,5-Furandione, polymer with 2-methyl-1-propene trimer (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1-Propene, 2-methyl-, trimer, polymer with 2,5-furandione (9CI)  
OTHER NAMES:  
CN Maleic anhydride-triisobutylene copolymer  
MF ((C4 H8)3 . C4 H2 O3)x  
CI PMS  
PCT Polyolefin, Polyvinyl

CM 1

CRN 108-31-6  
CMF C4 H2 O3

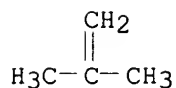


CM 2

CRN 7756-94-7  
CMF (C4 H8)3  
CCI PMS

CM 3

CRN 115-11-7  
CMF C4 H8



L89 ANSWER 140 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 55199-87-6 REGISTRY  
CN 2,5-Furandione, polymer with 2-methyl-1-propene, methyl ester, sodium salt (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, methyl ester, sodium salt (9CI)  
MF (C4 H8 . C4 H2 O3)x . x C H4 O . x Na  
PCT Polyolefin, Polyvinyl

LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL

CM 1

CRN 67-56-1  
CMF C H4 O

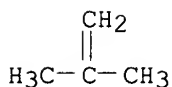
H<sub>3</sub>C-OH

CM 2

CRN 26426-80-2  
CMF (C4 H8 . C4 H2 O3)x  
CCI PMS

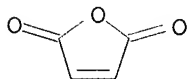
CM 3

CRN 115-11-7  
CMF C4 H8



CM 4

CRN 108-31-6  
CMF C4 H2 O3



4 REFERENCES IN FILE CA (1967 TO DATE)  
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 117:71330

REFERENCE 2: 87:152946

REFERENCE 3: 85:125304

REFERENCE 4: 82:141102

L89 ANSWER 141 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 55031-88-4 REGISTRY

CN 2-Butenedioic acid (2Z)-, disodium salt, polymer with 2-methyl-1-propene  
(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with (Z)-disodium 2-butenedioate

CN 1-Propene, 2-methyl-, polymer with disodium (2Z)-2-butenedioate (9CI)

CN 2-Butenedioic acid (Z)-, disodium salt, polymer with 2-methyl-1-propene

OTHER NAMES:

CN Isobutylene-disodium maleate polymer

CN Isobutylene-sodium maleate copolymer

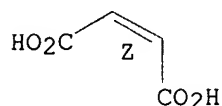
FS STEREOSEARCH  
 MF (C4 H8 . C4 H4 O4 . 2 Na)x  
 CI PMS  
 PCT Polyolefin, Polyvinyl  
 LC STN Files: CA, CAPLUS, CHEMLIST, IFICDB, IFIPAT, IFIUDB, USPATFULL

CM 1

CRN 371-47-1 (110-16-7)

CMF C4 H4 O4 . 2 Na

Double bond geometry as shown.

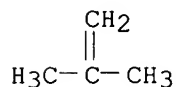


●2 Na

CM 2

CRN 115-11-7

CMF C4 H8



14 REFERENCES IN FILE CA (1967 TO DATE)  
 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 14 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:136641

REFERENCE 2: 135:79424

REFERENCE 3: 128:142133

REFERENCE 4: 127:235760

REFERENCE 5: 127:150291

REFERENCE 6: 124:297174

REFERENCE 7: 124:291656

REFERENCE 8: 122:316418

REFERENCE 9: 122:197069

REFERENCE 10: 121:141775

L89 ANSWER 142 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 54538-68-0 REGISTRY

CN 2,5-Furandione, polymer with 1,3-butadiene and 2-methyl-1-propene,  
 ammonium salt (9CI) (CA INDEX NAME)

## OTHER CA INDEX NAMES:

CN 1,3-Butadiene, polymer with 2,5-furandione and 2-methyl-1-propene,  
ammonium salt (9CI)  
CN 1-Propene, 2-methyl-, polymer with 1,3-butadiene and 2,5-furandione,  
ammonium salt (9CI)

## OTHER NAMES:

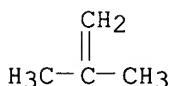
CN Butadiene-isobutene-maleic anhydride copolymer ammonium salt  
MF (C4 H8 . C4 H6 . C4 H2 O3)x . x H3 N  
PCT Polyolefin, Polyvinyl  
LC STN Files: CA, CAPLUS

CM 1

CRN 33518-77-3  
CMF (C4 H8 . C4 H6 . C4 H2 O3)x  
CCI PMS

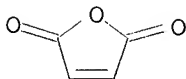
CM 2

CRN 115-11-7  
CMF C4 H8



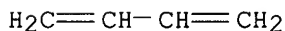
CM 3

CRN 108-31-6  
CMF C4 H2 O3



CM 4

CRN 106-99-0  
CMF C4 H6



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 82:113427

L89 ANSWER 143 OF 155 REGISTRY COPYRIGHT 2002 ACS  
RN 54452-28-7 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1,3-butadiene and  
2-methyl-1-propene, ammonium salt (9CI) (CA INDEX NAME)

## OTHER CA INDEX NAMES:

CN 1,3-Butadiene, 2-methyl-, polymer with 2,5-furandione and  
2-methyl-1-propene, ammonium salt (9CI)  
CN 1-Propene, 2-methyl-, polymer with 2,5-furandione and 2-methyl-1,3-

butadiene, ammonium salt (9CI)

OTHER NAMES:

CN Isobutene-isoprene-maleic anhydride copolymer ammonium salt

MF (C5 H8 . C4 H8 . C4 H2 O3)x . x H3 N

PCT Polyolefin, Polyvinyl

LC STN Files: CA, CAPLUS

CM 1

CRN 35502-98-8

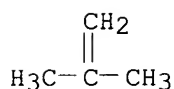
CMF (C5 H8 . C4 H8 . C4 H2 O3)x

CCI PMS

CM 2

CRN 115-11-7

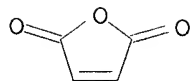
CMF C4 H8



CM 3

CRN 108-31-6

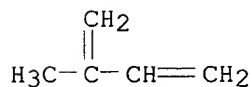
CMF C4 H2 O3



CM 4

CRN 78-79-5

CMF C5 H8



1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 82:113427

L89 ANSWER 144 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 54406-39-2 REGISTRY

CN 2-Propenoic acid, 2-methyl-, polymer with 2-methyl-1-propene (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2-methyl-2-propenoic acid (9CI)

OTHER NAMES:

CN Isobutene-methacrylic acid polymer

CN Isobutylene-methacrylic acid copolymer

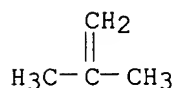
MF (C4 H8 . C4 H6 O2)x

CI PMS, COM  
PCT Polyacrylic, Polyolefin  
LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 115-11-7

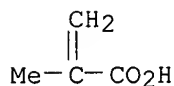
CMF C4 H8



CM 2

CRN 79-41-4

CMF C4 H6 O2



4 REFERENCES IN FILE CA (1967 TO DATE)  
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 133:296973

REFERENCE 2: 129:293780

REFERENCE 3: 105:88692

REFERENCE 4: 100:140955

L89 ANSWER 145 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 52032-17-4 REGISTRY

CN 2,5-Furandione, polymer with 2-methyl-1-propene, ammonium salt (9CI) (CA  
INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, ammonium salt (9CI)

OTHER NAMES:

CN Isobam 104

CN Isobam 110

CN Isobutene-maleic anhydride copolymer ammonium salt

CN Isobutene-maleic anhydride polymer ammonium salt

CN Isobutylene-maleic anhydride copolymer ammonium salt

CN Isobutylene-maleic anhydride polymer ammonium salt

MF (C4 H8 . C4 H2 O3)x . x H3 N

PCT Polyolefin, Polyvinyl

LC STN Files: CA, CAPLUS, CHEMCATS, IFICDB, IFIPAT, IFIUDB, TOXCENTER,  
USPATFULL

CM 1

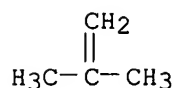
CRN 26426-80-2

CMF (C4 H8 . C4 H2 O3)x

CCI PMS

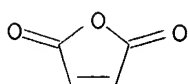
CM 2

CRN 115-11-7  
CMF C4 H8



CM 3

CRN 108-31-6  
CMF C4 H2 O3



129 REFERENCES IN FILE CA (1967 TO DATE)  
8 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
129 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 137:109988  
REFERENCE 2: 135:319720  
REFERENCE 3: 134:374103  
REFERENCE 4: 134:359566  
REFERENCE 5: 134:245284  
REFERENCE 6: 134:87972  
REFERENCE 7: 134:73311  
REFERENCE 8: 134:6843  
REFERENCE 9: 133:297491  
REFERENCE 10: 133:226672

L89 ANSWER 146 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 51772-79-3 REGISTRY

CN 2-Butenedioic acid (2Z)-, polymer with 2-methyl-1-propene, copper(2+) salt  
(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with (2Z)-2-butenedioic acid, copper(2+) salt (9CI)

CN 1-Propene, 2-methyl-, polymer with (Z)-2-butenedioic acid, copper(2+) salt

CN 2-Butenedioic acid (Z)-, polymer with 2-methyl-1-propene, copper(2+) salt

OTHER NAMES:

CN Maleic acid-isobutylene polymer copper(II) salt

FS STEREOSEARCH

MF (C4 H8 . C4 H4 O4)x . x Cu

PCT Polyolefin, Polyvinyl

LC STN Files: CA, CAPLUS

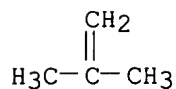
CM 1



CRN 28327-80-2  
 CMF (C4 H8 . C4 H4 O4)x  
 CCI PMS

CM 2

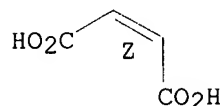
CRN 115-11-7  
 CMF C4 H8



CM 3

CRN 110-16-7  
 CMF C4 H4 O4

Double bond geometry as shown.



1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 81:26139

L89 ANSWER 147 OF 155 REGISTRY COPYRIGHT 2002 ACS  
 RN 39612-00-5 REGISTRY  
 CN 2,5-Furandione, polymer with 2-methyl-1-propene, sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2,5-furandione, sodium salt (9CI)

OTHER NAMES:

CN Isobutene-maleic anhydride copolymer sodium salt

CN Isobutene-maleic anhydride polymer sodium salt

CN Isobutylene-maleic anhydride copolymer sodium salt

CN KI Gel 210K-F2

DR 110650-70-9

MF (C4 H8 . C4 H2 O3)x . x Na

PCT Polyolefin, Polyvinyl

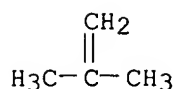
LC STN Files: CA, CAPLUS, CHEMCATS, CHEMLIST, CSCHEM, IFICDB, IFIPAT, IFIUDB, TOXCENTER, USPATFULL

CM 1

CRN 26426-80-2  
 CMF (C4 H8 . C4 H2 O3)x  
 CCI PMS

CM 2

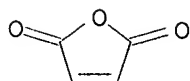
CRN 115-11-7  
 CMF C4 H8



CM 3

CRN 108-31-6

CMF C4 H2 O3



114 REFERENCES IN FILE CA (1967 TO DATE)  
 9 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 114 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 137:34605  
 REFERENCE 2: 136:387540  
 REFERENCE 3: 136:387536  
 REFERENCE 4: 133:297491  
 REFERENCE 5: 133:225428  
 REFERENCE 6: 133:224468  
 REFERENCE 7: 133:139952  
 REFERENCE 8: 133:116175  
 REFERENCE 9: 132:94365  
 REFERENCE 10: 131:244758

L89 ANSWER 148 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 38531-22-5 REGISTRY

CN 2-Propenoic acid, polymer with ethene, compd. with 2,2',2''-nitrilotris[ethanol] (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Ethanol, 2,2',2''-nitrilotris-, compd. with ethene polymer with 2-propenoic acid (9CI)

CN Ethene, polymer with 2-propenoic acid, compd. with 2,2',2''-nitrilotris[ethanol] (9CI)

OTHER NAMES:

CN Acrylic acid-ethylene copolymer triethanolamine salt

CN Acrylic acid-ethylene polymer triethanolamine salt

DR 129022-19-1

MF C6 H15 N O3 . x (C3 H4 O2 . C2 H4)x

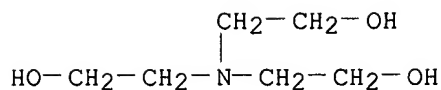
PCT Polyacrylic, Polyolefin

LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL

CM 1

CRN 102-71-6

CMF C6 H15 N O3

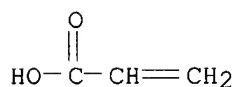


CM 2

CRN 9010-77-9  
 CMF (C3 H4 O2 . C2 H4) x  
 CCI PMS

CM 3

CRN 79-10-7  
 CMF C3 H4 O2



CM 4

CRN 74-85-1  
 CMF C2 H4



7 REFERENCES IN FILE CA (1967 TO DATE)  
 7 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 132:37070  
 REFERENCE 2: 131:185986  
 REFERENCE 3: 119:205525  
 REFERENCE 4: 119:10091  
 REFERENCE 5: 113:98731  
 REFERENCE 6: 106:121527  
 REFERENCE 7: 77:50355

L89 ANSWER 149 OF 155 REGISTRY COPYRIGHT 2002 ACS  
 RN 38531-17-8 REGISTRY  
 CN 2-Propenoic acid, polymer with ethene, compd. with 2-(diethylamino)ethanol  
 (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Ethanol, 2-(diethylamino)-, compd. with ethene polymer with 2-propenoic  
 acid (9CI)  
 CN Ethene, polymer with 2-propenoic acid, compd. with 2-(diethylamino)ethanol  
 (9CI)  
 OTHER NAMES:  
 CN Acrylic acid-ethylene copolymer N,N-diethylethanolamine salt

MF C6 H15 N O . x (C3 H4 O2 . C2 H4)x  
 PCT Polyacrylic, Polyolefin  
 LC STN Files: CA, CAPLUS, CHEMLIST, IFICDB, IFIPAT, IFIUDB, USPATFULL  
 Other Sources: NDSL\*\*, TSCA\*\*  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)

CM 1

CRN 100-37-8  
 CMF C6 H15 N O

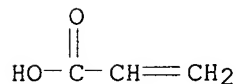
Et<sub>2</sub>N-CH<sub>2</sub>-CH<sub>2</sub>-OH

CM 2

CRN 9010-77-9  
 CMF (C3 H4 O2 . C2 H4)x  
 CCI PMS

CM 3

CRN 79-10-7  
 CMF C3 H4 O2



CM 4

CRN 74-85-1  
 CMF C2 H4



3 REFERENCES IN FILE CA (1967 TO DATE)  
 3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 106:121527

REFERENCE 2: 106:68842

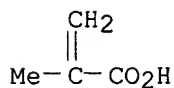
REFERENCE 3: 77:50355

L89 ANSWER 150 OF 155 REGISTRY COPYRIGHT 2002 ACS  
 RN 35528-36-0 REGISTRY  
 CN 2-Propenoic acid, 2-methyl-, polymer with ethene and oxirane (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Ethene, polymer with 2-methyl-2-propenoic acid and oxirane (9CI)  
 CN Oxirane, polymer with ethene and 2-methyl-2-propenoic acid (9CI)  
 OTHER NAMES:  
 CN Ethylene-ethylene oxide-methacrylic acid polymer  
 MF (C4 H6 O2 . C2 H4 O . C2 H4)x  
 CI PMS

PCT Polyacrylic, Polyether, Polyether formed, Polyolefin  
LC STN Files: CA, CAPLUS

CM 1

CRN 79-41-4  
CMF C4 H6 O2



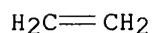
CM 2

CRN 75-21-8  
CMF C2 H4 O



CM 3

CRN 74-85-1  
CMF C2 H4



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 76:73031

L89 ANSWER 151 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 31904-94-6 REGISTRY

CN Butanedioic acid, polymer with 1,2,3-propanetriol and 2-propenoic acid  
(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,2,3-Propanetriol, polymer with butanedioic acid and 2-propenoic acid  
(9CI)

CN 2-Propenoic acid, polymer with butanedioic acid and 1,2,3-propanetriol  
(9CI)

CN Succinic acid, polyester with acrylic acid and glycerol (8CI)

OTHER NAMES:

CN Glycerine diacrylate succinate

MF (C4 H6 O4 . C3 H8 O3 . C3 H4 O2)x

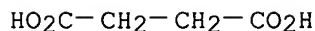
CI PMS

PCT Polyacrylic, Polyester, Polyester formed

LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB

CM 1

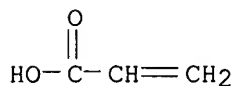
CRN 110-15-6  
CMF C4 H6 O4



CM 2

CRN 79-10-7

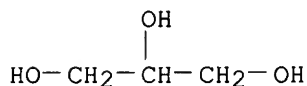
CMF C3 H4 O2



CM 3

CRN 56-81-5

CMF C3 H8 O3



2 REFERENCES IN FILE CA (1967 TO DATE)

2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 76:101346

REFERENCE 2: 74:88758

L89 ANSWER 152 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 30915-64-1 REGISTRY

CN 2-Butenedioic acid (2Z)-, polymer with 2-methyl-1-propene, sodium salt  
(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with (2Z)-2-butenedioic acid, sodium salt  
(9CI)

CN 1-Propene, 2-methyl-, polymer with (Z)-2-butenedioic acid, sodium salt

CN 2-Butenedioic acid (Z)-, polymer with 2-methyl-1-propene, sodium salt

CN Maleic acid, polymer with 2-methylpropene, sodium salt (8CI)

OTHER NAMES:

CN Isobutene-maleic acid copolymer sodium salt

CN Isobutylene-maleic acid copolymer sodium salt

CN Polystar OMR

FS STEREOSEARCH

DR 110864-53-4

MF (C4 H8 . C4 H4 O4)x . x Na

PCT Polyolefin, Polyvinyl

LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, TOXCENTER, USPATFULL

CM 1

CRN 28327-80-2

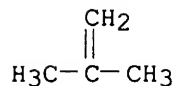
CMF (C4 H8 . C4 H4 O4)x

CCI PMS

CM 2

CRN 115-11-7

CMF C4 H8

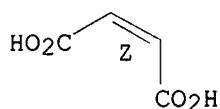


CM 3

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



39 REFERENCES IN FILE CA (1967 TO DATE)  
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
39 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 137:142221  
REFERENCE 2: 133:256547  
REFERENCE 3: 128:220860  
REFERENCE 4: 128:105437  
REFERENCE 5: 127:308661  
REFERENCE 6: 125:307338  
REFERENCE 7: 124:95603  
REFERENCE 8: 116:230204  
REFERENCE 9: 115:186619  
REFERENCE 10: 115:116846

L89 ANSWER 153 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 28327-80-2 REGISTRY

CN 2-Butenedioic acid (2Z)-, polymer with 2-methyl-1-propene (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with (2Z)-2-butenedioic acid (9CI)  
CN 1-Propene, 2-methyl-, polymer with (Z)-2-butenedioic acid  
CN 2-Butenedioic acid (Z)-, polymer with 2-methyl-1-propene  
CN Maleic acid, polymer with 2-methylpropene (8CI)  
CN Propene, 2-methyl-, polymer with maleic acid (8CI)

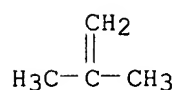
OTHER NAMES:

CN Isobutene-maleic acid copolymer  
CN Isobutene-maleic acid polymer  
CN Isobutylene-maleic acid copolymer  
CN Isobutylene-maleic acid polymer  
CN KI 210  
CN Maleic acid-isobutene copolymer

CN Maleic acid-isobutene polymer  
 CN Maleic acid-isobutylene copolymer  
 CN Maleic acid-isobutylene polymer  
 FS STEREOSEARCH  
 DR 77045-93-3  
 MF (C4 H8 . C4 H4 O4)x  
 CI PMS, COM  
 PCT Polyolefin, Polyvinyl  
 LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, TOXCENTER, USPATFULL

CM 1

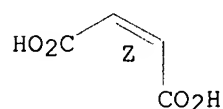
CRN 115-11-7  
 CMF C4 H8



CM 2

CRN 110-16-7  
 CMF C4 H4 O4

Double bond geometry as shown.



135 REFERENCES IN FILE CA (1967 TO DATE)  
 16 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 135 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:387626  
 REFERENCE 2: 136:281959  
 REFERENCE 3: 135:181524  
 REFERENCE 4: 135:181502  
 REFERENCE 5: 135:66063  
 REFERENCE 6: 134:180345  
 REFERENCE 7: 134:166268  
 REFERENCE 8: 134:149334  
 REFERENCE 9: 133:283717  
 REFERENCE 10: 133:218842

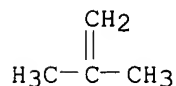
L89 ANSWER 154 OF 155 REGISTRY COPYRIGHT 2002 ACS  
 RN 26426-80-2 REGISTRY  
 CN 2,5-Furandione, polymer with 2-methyl-1-propene (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:



CN 1-Propene, 2-methyl-, polymer with 2,5-furandione (9CI)  
 CN Maleic anhydride, polymer with 2-methylpropene (8CI)  
 CN Propene, 2-methyl-, polymer with maleic anhydride (8CI)  
 OTHER NAMES:  
 CN BM 30AE20  
 CN Fibersorb SA 7200H  
 CN IB 6  
 CN Isobam  
 CN Isobam 01  
 CN Isobam 04  
 CN Isobam 06  
 CN Isobam 18  
 CN Isobam 304D  
 CN Isobam 600  
 CN Isobam HH  
 CN Isobutene-maleic anhydride copolymer  
 CN Isobutene-maleic anhydride polymer  
 CN Isobutylene-maleic acid anhydride copolymer  
 CN Isobutylene-maleic anhydride copolymer  
 CN Isobutylene-maleic anhydride polymer  
 CN KI Gel  
 CN KI Gel 20  
 CN KI Gel 201K-F2  
 CN KI Gel 201K-F3  
 CN KI Gel 201K-F4Q  
 CN KI Gel 210K  
 CN KI Gel F 3  
 CN Kuratack 110  
 CN Maleic anhydride-isobutene copolymer  
 CN Maleic anhydride-isobutylene copolymer  
 CN PE 60  
 CN T 731  
 DR 97048-07-2, 110650-69-6  
 MF (C4 H8 . C4 H2 O3)x  
 CI PMS, COM  
 PCT Polyolefin, Polyvinyl  
 LC STN Files: BIOSIS, CA, CAPLUS, CHEMCATS, CHEMLIST, CIN, IFICDB, IFIPAT,  
 IFIUDB, MEDLINE, PROMT, TOXCENTER, USPAT2, USPATFULL  
 Other Sources: DSL\*\*, TSCA\*\*  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)

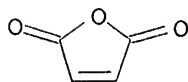
CM 1

CRN 115-11-7  
 CMF C4 H8



CM 2

CRN 108-31-6  
 CMF C4 H2 O3



965 REFERENCES IN FILE CA (1967 TO DATE)  
242 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
965 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 137:141614

REFERENCE 2: 137:110636

REFERENCE 3: 137:110620

REFERENCE 4: 137:94942

REFERENCE 5: 137:94921

REFERENCE 6: 137:21388

REFERENCE 7: 136:370731

REFERENCE 8: 136:329926

REFERENCE 9: 136:326031

REFERENCE 10: 136:301881

L89 ANSWER 155 OF 155 REGISTRY COPYRIGHT 2002 ACS

RN 25038-20-4 REGISTRY

CN 2-Propenoic acid, polymer with 2-methyl-1-propene (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Propene, 2-methyl-, polymer with 2-propenoic acid (9CI)

OTHER NAMES:

CN Acrylic acid-isobutene copolymer

CN Acrylic acid-isobutene polymer

CN Acrylic acid-isobutylene copolymer

CN Acrylic acid-isobutylene polymer

MF (C4 H8 . C3 H4 O2)x

CI PMS, COM

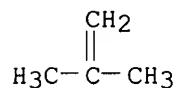
PCT Polyacrylic, Polyolefin

LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL

CM 1

CRN 115-11-7

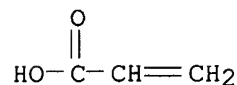
CMF C4 H8



CM 2

CRN 79-10-7

CMF C3 H4 O2



8 REFERENCES IN FILE CA (1967 TO DATE)  
8 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:402104  
REFERENCE 2: 130:298230  
REFERENCE 3: 100:140955  
REFERENCE 4: 94:217502  
REFERENCE 5: 87:86070  
REFERENCE 6: 80:49530  
REFERENCE 7: 78:160362  
REFERENCE 8: 77:140924

=> d his

(FILE 'HOME' ENTERED AT 08:30:33 ON 30 AUG 2002)  
SET COST OFF

FILE 'HCAPLUS' ENTERED AT 08:30:53 ON 30 AUG 2002

L1 E KLUG P/AU  
62 S E3,E7  
E HENNING T/AU  
L2 100 S E3-E5,E14  
E SCHERL F/AU  
L3 8 S E4,E5  
E CLARIANT/PA,CS  
L4 1103 S E3,E4  
L5 168 S L1,L2,L3  
L6 1 S L5 AND ?SUCCIN?  
L7 42 S L4 AND L5  
L8 1 S L1 AND L2,L3  
L9 1 S L2 AND L3  
L10 1 S L8,L9  
SEL AN DN L7 5  
L11 1 S E1-E3  
L12 1 S L10,L11  
SEL RN

FILE 'REGISTRY' ENTERED AT 08:39:19 ON 30 AUG 2002

L13 8 S E4-E11  
E ETHYLENE/CN  
L14 1 S E3  
E PROPYLENE/CN  
L15 1 S E3  
E BUTYLENE/CN  
L16 1 S E3  
E IOSBUTENE/CN  
E IOSBUTLENE/CN  
E IOSBUTYLENE/CN  
E ISOBUTENE/CN  
L17 1 S E3  
L18 4 S L14-L17  
L19 2 S 108-30-5 OR 110-15-6  
E ACRYLIC ANHYDRIDE/CN  
L20 1 S E3  
E METHACRYLIC ANHYDRIDE/CN

L21 1 S E3  
L22 2 S 79-10-7 OR 79-41-4  
L23 4 S 6915-18-0 OR 110-17-8 OR 110-16-7 OR 108-31-6  
L24 8 S L20-L23  
L25 2 S 25322-68-3 OR 75-21-8  
L26 4 S 56-81-5 OR 102-71-6 OR 112-35-6 OR 100-37-8  
L27 6 S L18 OR L19  
SEL RN  
L28 23796 S E1-E6/CRN  
SEL RN L24  
L29 157109 S E7-E14/CRN  
L30 6 S L25 OR L26  
SEL RN  
L31 45097 S E15-E20/CRN  
L32 4751 S L28 AND L29  
L33 148 S L32 AND L31  
L34 41 S L33 AND 46.150.18/RID  
L35 107 S L33 NOT L34  
L36 19 S C3H6O AND L35  
L37 88 S L35 NOT L36  
L38 51 S L37 AND (C7H12 OR C4H8O OR C3H5CLO OR C3H8O3 OR CH2O OR C7H10  
L39 7 S L37 AND ((C6 OR NC2)/ES OR (SI OR S)/ELS)  
L40 12 S L38 AND 3/NC  
L41 1732 S 556-52-5/CRN  
L42 41 S L38 NOT L41  
L43 9 S L42 AND 3/NC  
L44 6 S L43 NOT (N/ELS OR ACETATE)  
L45 1 S L42 AND NA/ELS  
L46 2 S L42 AND CH4O  
L47 8 S L42 AND C2H4 AND C4H6O2 AND C2H4O  
L48 6 S L47 NOT (C6H10 OR CH2O)  
L49 78 S L37 NOT L41  
L50 37 S L49 NOT L38  
L51 9 S L50 AND (SI/ELS OR 67-56-1/CRN OR DODECYL OR OCTADECANOIC OR  
L52 28 S L50 NOT L51  
L53 8 S 115-11-7/CRN AND (108-30-5 OR 110-15-6)/CRN  
L54 2 S L53 AND 2/NC  
L55 4 S L53 AND 3/NC  
L56 1 S L53 AND H3N  
L57 1 S L55 NOT N/ELS  
L58 4 S L53 NOT L54, L56, L57  
SEL RN L23  
L59 419 S E21-E24/CRN AND 115-11-7/CRN  
L60 8 S L59 AND 2/NC  
L61 27 S L59 AND L31  
L62 7 S L61 AND 3/NC  
L63 4 S L62 NOT (556-52-5/CRN OR C6/ES)  
L64 20 S L61 NOT L62  
L65 8 S L64 AND (NA/ELS OR H3N)  
L66 3 S L65 NOT 556-52-5/CRN  
L67 1 S 115634-83-8  
L68 107 S L59 AND (556-52-5/CRN OR C6/ES)  
L69 291 S L59 NOT L60-L68  
L70 173 S L69 NOT SALT  
L71 118 S L69 NOT L70  
L72 30 S L71 AND 3/NC  
L73 28 S L72 NOT (C2H7NO OR CH5N3)  
L74 71 S L71 AND 4/NC  
L75 6 S L74 AND NA/ELS AND (MG OR CA OR ZN OR AL OR FE OR NI)/ELS  
L76 129 S L70 AND 3/NC  
L77 97 S L76 NOT N/ELS  
L78 92 S L77 NOT UNSPECIFIED  
L79 86 S L78 NOT CYCLODEX?

L80 4 S L20-L22  
SEL RN  
L81 87 S E25-E28/CRN AND 115-11-7/CRN  
L82 4 S L81 AND 2/NC  
L83 5 S L81 AND L31  
L84 78 S L81 NOT L82,L83  
L85 8 S L84 AND NA/ELS  
L86 6 S L85 NOT (N OR F)/ELS  
L87 3 S L86 AND 3/NC  
L88 1 S L86 AND C4H8 AND C4H2O3 AND C3H4O2  
L89 155 S L44,L45,L46,L48,L52,L54,L56,L57,L60,L63,L67,L73,L74,L82,L87,L  
SAV TEMP L89 ALY003656/A

FILE 'HCAPLUS' ENTERED AT 10:34:20 ON 30 AUG 2002

L90 1561 S L89  
L91 1548 S L90 AND (PY<=2000 OR PRY<=2000 OR AY<=2000)  
L92 0 S L4,L5 AND L90  
L93 147 S (COSMETIC# OR PHARMACEUT?)/SC,SX AND L91  
E EMUSIF/CT  
E EMULSIF/CT  
L94 18505 S E4+NT OR E21+NT  
L95 0 S L93 AND L94  
L96 17 S L91 AND L94  
L97 96819 S COSMETIC#/CW OR DRUG DELIVERY SYSTEM#/CT  
L98 25 S L93 AND L97  
L99 11 S L93 AND ?EMULS?  
L100 24696 S L19  
L101 92878 S L17,L18  
L102 9409 S L100,L101 AND L20-L22,L23  
L103 755 S L25,L26 AND L102  
L104 133 S L103 AND (COSMETIC# OR PHARMACEUT?)/SC,SX  
L105 49 S L103 AND (COSMETIC# OR PHARMACEUT?)/CW  
L106 42 S L103 AND DRUG DELIVERY?/CT  
L107 136 S L104-L106  
L108 30 S L4,L5 AND L100,L101  
L109 7 S L108 AND L24  
L110 1 S L5 AND L108  
L111 1 S L110 AND L25,L26  
L112 1879 S L100 AND L25,L26  
L113 4120 S L24 AND L25,L26  
L114 363 S L112,L113 AND COSMETIC#/SC,SC,CW  
L115 800 S L112,L113 AND PHARMACEUT?/SC,SX,CW  
L116 320 S L112,L113 AND DRUG DELIVER?/CT  
L117 142 S L114-L116 AND ?EMULS?  
L118 41 S L117 AND ?SUCCIN?  
L119 12 S L117 AND ?ISOBUT?  
L120 0 S L17 AND L117  
L121 49 S L118,L119  
L122 2 S L121 AND L91  
L123 21 S L98 NOT L99  
SEL DN AN 9  
L124 1 S E1-E3  
L125 2 S L111,L124  
L126 1 S L89 (L) COS/RL  
L127 41 S L89 (L) THU/RL  
L128 24 S L89 AND 62/SC  
L129 65 S L125-L128 AND L1-L12,L90-L128  
L130 65 S L129 AND (PY<=2000 OR PRY<=2000 OR AY<=2000)  
L131 1879 S L19 AND L25,L26  
L132 77 S L131 AND 62/SC  
L133 74 S L132 AND (PY<=2000 OR PRY<=2000 OR AY<=2000)  
L134 4 S L133 AND L94  
L135 12 S L133 AND ?EMULS? NOT L134

SEL DN AN 4 12  
L136 2 S L135 AND E4-E9  
L137 4 S L125,L136  
L138 2 S L130 AND L137  
L139 4 S L137,L138  
L140 63 S L130 NOT L139  
L141 7 S L140 AND (OLEFIN? OR CONETWORK? OR ISOBUTYL? OR MODIF? MALEIC  
L142 11 S L139,L141 AND L1-L12,L90-L141  
L143 11 S L142 AND (?SUCCIN? OR ?MALEIC? OR ?ISOBUT? OR ?ACRYL? OR ?EMU  
L144 4 S L13 AND L143  
L145 11 S L143,L144

FILE 'HCAPLUS' ENTERED AT 11:11:18 ON 30 AUG 2002

FILE 'REGISTRY' ENTERED AT 11:11:38 ON 30 AUG 2002